FAMILIARIZATION TRAINING COURSE FOR THE NEW TACTICAL FORECAST SYSTEM (NTFS 3.1.1)

UNIT 1: OVERVIEW OF NTFS 3.1.1

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- **NTFS 3.1.1 Hardware Enhancements.**
  - Provide Intel Server Option.
    - Workstations.
      - Red-Hat Linux 7.1 Operating System.
      - 73GB External / 18GB Internal Hard Drive.
      - 21" Color Monitor.
      - Dell PowerEdge 2500 Single Option.
        - Single 1.13GHz P3 w/512KB Cache.
        - 512MB RAM.
      - Dell PowerEdge 2500 Dual Option.
        - Dual 1.13 GHz P3's w/512KB Cache.
        - 1024MB RAM.

UNIT 1: OVERVIEW OF NTFS 3.1.1

- **NTFS 3.1.1 Hardware Enhancements.**
  - Provide Intel Server Option.
    - Workstations.
      - Dell PowerEdge 6600 Quad Option.
        - Quad 1.4GHz P4 Xeon's w/512MB Cache.
        - 1024MB RAM.
        - Redundant Hot-Swap Power Supply and Cooling Fans.

UNIT 1: OVERVIEW OF NTFS 3.1.1

- **NTFS 3.1.1 Hardware Enhancements.**
  - Provide Intel Server Option.
    - Deployable Laptops.
      - Dell Latitude C840.
      - Single 1.6GHz P4 w/512KB Cache.
      - 1024MB RAM.
      - 60GB Hard Drive.
      - 15" Color LCD (1600x1200).
      - Red-Hat Linux 7.1 Operating System.
      - Installed with VMware.
        - Allows Server and Client SW on Same Platform.

UNIT 1: OVERVIEW OF NTFS 3.1.1

PowerEdge 2500   **PowerEdge 6600**   **Latitude C840**

UNIT 1: OVERVIEW OF NTFS 3.1.1

- **NTFS 3.1.1 Hardware Enhancements.**

  - Stand-Alone Local Weather Network System (LWNS) Server.

    - FAA, ANG, and USAFR Support.

  - Upgrade FCF/ATC Monitor and Keypad.

    - Processor Upgraded in NTFS 2.0.

    - 9" or 15" Color Monitor.

    - Upgraded Keypad to Support New Capabilities.

      - Similar to Existing FCF/ATC Keypad with New Face Plate.

    - Finger-Mouse Added.

UNIT 1: OVERVIEW OF NTFS 3.1.1

- **NTFS 3.1.1 Software Enhancements.**

  – Ported SPARC Server SW to Solaris 8.

  – Ported Server SW to Red-Hat Linux 7.1.

  – Created LWNS/ATC and Local Operations Client (LOC) Software.

    - Planned to Replace Current FCF/ATC Hardware and Software.

    - FCF/FO's Are No Longer Supported.

    - Uses Windows NT/2000 OS.

    - C/DM May Still Be Required.

      – Legacy FCF/ATC's are Still Supported.

UNIT 1: OVERVIEW OF NTFS 3.1.1

- **NTFS 3.1.1 Software Enhancements.**
  - System Manager/CSSO Enhancements.
    - Secure Shell (SSH) for Remote Maintenance Support.
    - Secure Socket Layer (SSL) Support.
    - IP Filters (Firewall) Support.
    - Users Report.
    - LWNS Position Creation.
    - LWNS Product Catalog Maintenance.
    - Option to Not Delete FTP'd Files From Source System.
    - NITF Product Staging.
    - Capability to Change Default Primary ICAO.

UNIT 1: OVERVIEW OF NTFS 3.1.1

- **NTFS 3.1.1 Software Enhancements.**
  - A/N Enhancements.
    - Capability to Ingest WMO Formatted A/N Data via FTP.
    - Added a "Merged Obs" Display From Launch Pad.
    - Moved Wind Shear Remarks Between Sky and Icing in TAF Format.
    - Warning, Watch, and Advisory Receipt Acknowledgements From LWNS Clients.
    - Receipt Acknowledgement Report (RAP).
    - Capability to Produce Automated TAFVER Reports.
    - Capability to Transmit Form 3813 Information to AFCCC.
    - Capability to View CWT LWDS From OWS Without Logging Into CWT.

UNIT 1: OVERVIEW OF NTFS 3.1.1

- **NTFS 3.1.1 Software Enhancements.**

  - Graphics Enhancements.

    - Customized Area-of-Interest (AOI) Backgrounds Using Hi-Resolution DTED and GTOPO30 (Terrain/Elevation Data) Mapping Information.

    - Added EXTERNAL GIF/JPG Location and Parameter Filters.

      - Uses Long ASCII Header (LAH) Information.

      - Similar to Product Viewer->Other Weather Products Search.

    - Local Caching of METSAT/NEXRAD/NITF Products and Backgrounds.

    - Ingest, Display, Creation, and Transmission of NITF Products.

    - Capability to Remove a Single Product From a Loop Sequence.

UNIT 1: OVERVIEW OF NTFS 3.1.1

- **NTFS 3.1.1 Software Enhancements.**

  - Misc. Enhancements.

    - Capability to Receive Urgent and Routine Alerts via FTP.

      - NTFS and LWNS Clients.

    - Browser Creation of Backgrounds Using Hi-Resolution DTED and GTOPO30 (Terrain/Elevation Data) Mapping Information.

    - Capability the Retrieve/Store GIDS Products at the NTFS Server, and FTP Fetch GIDS Products Using the GIDS Viewer.

UNIT 2: LINUX SERVER OPERATIONS

UNIT 2: LINUX SERVER OPERATIONS

- **All User Operations and MMI Are Identical to the SPARC Server.**

  - Effort Made to "Map" SPARC Openwindows Look-and-Feel to Linux fvwm Look-and-Feel.

  - Clocks and Console Window "Look" Slightly Different.

  - Login and Shutdown/Bootup Slightly Different.

UNIT 2: LINUX SERVER OPERATIONS

- **Logging Onto the Server.**
  - From the "Login for NTFS Server" Login Screen, Type Your Username in the "Login" Field.
  - Enter Your Password in the "Password" Field.
  - Select <Return>, or "Go!".

UNIT 2: LINUX SERVER OPERATIONS

- **Logging Onto the Server.**

  – Blank Screen Saver Activated if the Login Screen is Displayed for More Than 5 Minutes.

    - Press <Return>, or Move the Mouse to Display the Login Screen.

UNIT 2: LINUX SERVER OPERATIONS

- **Logging Onto the Server.**

  – Server Will Display The Following:

    - Console Window Icon in Upper Right.

    - 2 Clocks (Local and UTC).

    - DOD Notice and Consent Banner Window (Automatically Removed After 60 Seconds).

    - SSL Activation Warning Window (Automatically Removed After 60 Seconds).

      – Only Displayed if SSL is Active.

UNIT 2: LINUX SERVER OPERATIONS

- **Shutting Down the Server.**
  - From the NTFS Main Workspace Menu, Select "**Shutdown Server->Shutdown Server**".
  - Ignore All Displayed System Screens and Messages.
  - Server Will Display "Power down.".
  - Turn-Off the Server.

UNIT 2: LINUX SERVER OPERATIONS

- **Rebooting the Server.**
  - With the Server Powered-Off, Turn-On the Server.

  - Server Will Perform Self-Test and Initiate Boot-Up Sequence.

  - Server Will Display "Login for NTFS Server" Login Screen When Completed.

UNIT 3: COMMON SERVER OPERATIONS

UNIT 3: COMMON SERVER OPERATIONS

- **Tcl/Tk System Status Report.**
  - Removed "Remote Copy Processes" Status from Display.
    - Function Has Been Incorporated Into the Database Process (PSR).
  - Removed "Longline Comm (ADCIO)" Status from Display.
    - SCOMP.
  - Added "Secure Shell (SSH)", "IP Filters" and "SSL" Display.
    - Will Indicate Whether Function is "Disabled" or "Enabled".

TRAINING COURSE

UNIT 3: COMMON SERVER OPERATIONS

- **Tcl/Tk System Status Report.**
  - Added "UPS Monitor".
    - Will Display Under NTFS Server or C/DM Processes, Whichever is Configured With the UPS.
  - C/DM Processes May Now Indicate "Removed".
    - SCOMP.

UNIT 3: COMMON SERVER OPERATIONS

New Status Indicators

UPS Monitor Status

System Status Panel

UNIT 3: COMMON SERVER OPERATIONS

- **Tcl/Tk System Restart Menu.**

  – Removed "Longline Communications" Selection.

    • SCOMP.

- **NTFS Main Workspace Menu.**

  – Removed "TAF Verification" Selection.

    • Not Used.

  – Added "SDB Data Receipt Trace" Selection.

    • Product Traces->SDB Data Receipt Trace.

    • Real-Time Trace of Incoming AOS Data From SNR.

    • Will Automatically Close After 5 Minutes.

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UNIT 3: COMMON SERVER OPERATIONS
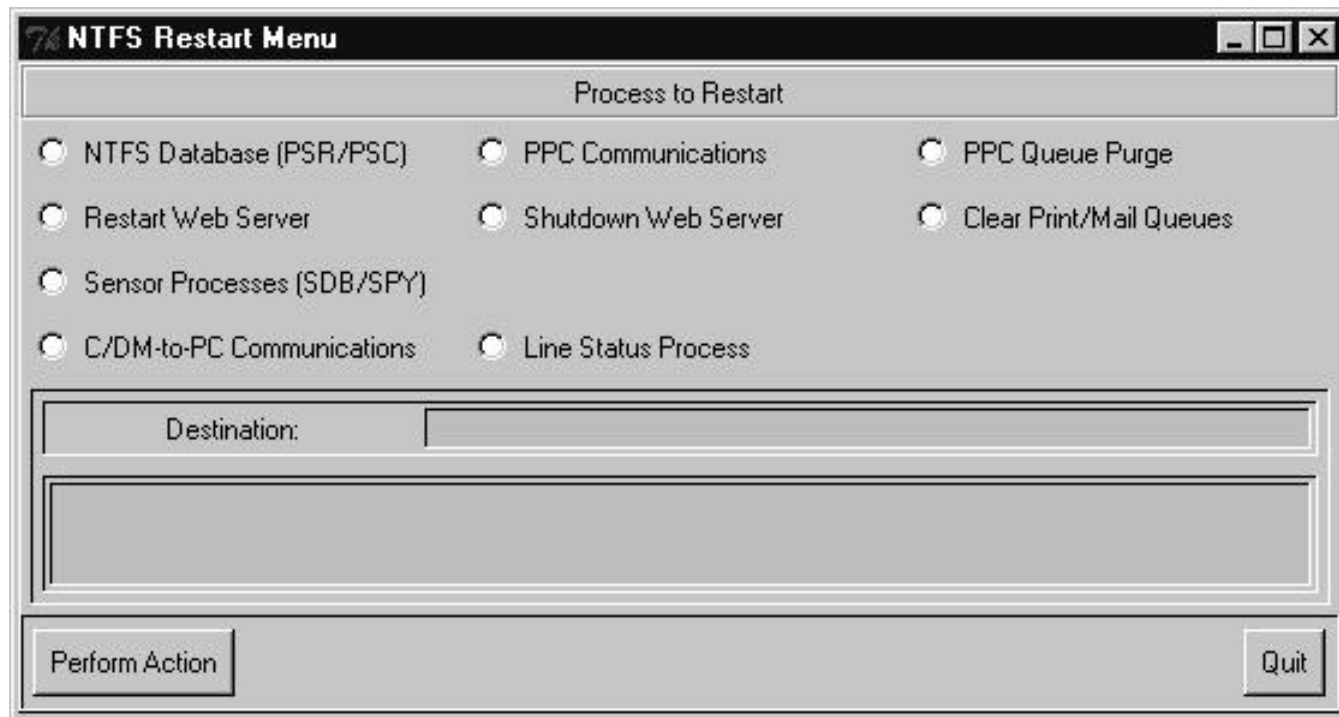
Restart Panel

UNIT 3: COMMON SERVER OPERATIONS

- **Ability to Receive Urgent and Routine Alerts via FTP.**

  – Source Agency Follows General Dynamics Created, and Government Approved ICD Format.

  – Ingest Allowed via RSM FTP Ingest Authorization.

    • Select **FTP->Ingest Authorizations** to Configure Username and Password.

  – Alerts Will Be Displayed in Both the NTFS and LWNS Clients.

    • Configure NTFS Clients For External Alerts Using RSM **Alerts->System Error** Table.

    • LWNS Clients Will Always Display Alerts.

UNIT 4: SYSTEM MANAGER

UNIT 4: SYSTEM MANAGER

- **Client Login Panel.**
  - Added "Normal" and "Secure" Connection Modes.
    - "Normal" Connection (e.g. Port 80, 82).
    - "Secure" Uses SSL Connection (e.g. Port 443).
  - Port and Mode Must Match Server Configuration.
    - RSM **CSSO Access Control->Server Access Control**.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER

Connection Mode Selections

Login Panel

UNIT 4: SYSTEM MANAGER

- **Client Preference Panel.**
  - Select **Silence** to Turn-Off Urgent and/or Routine Alert Sounds.
  - Toggle "Auto Display" to Automatically De-iconify Client Window When Routine and/or Urgent Alert Arrives.
  - Select **Save** to Save Preferences to Server for Each Username.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER
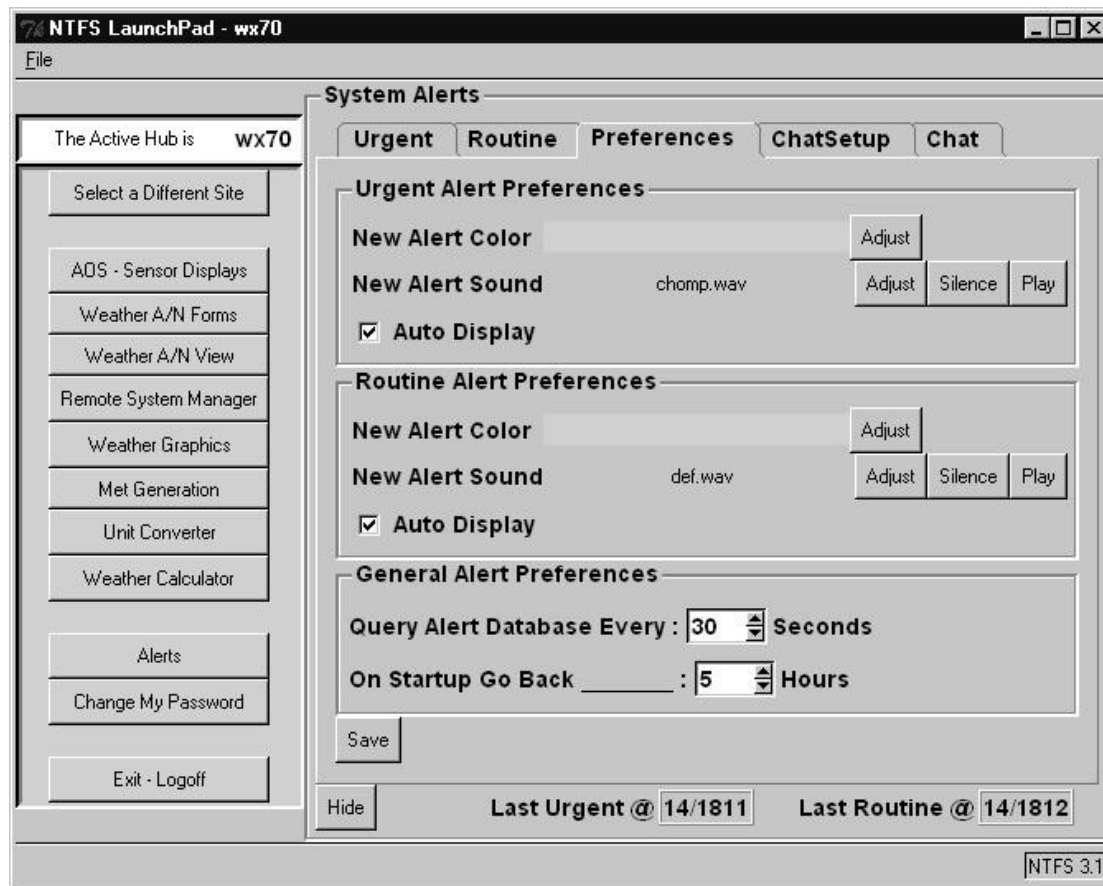
Alert Preferences Panel

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - CD Operations->Export/Import->Read.
    - Allow Selective File Copies Within Directories, Instead of Entire Directory.
      - With Directory Moved to "Recipients Column" (Only Those Filenames Beginning With "Dir" are Directories), Select "Expand Directory".
        - List of Files Within Selected Directory is Displayed in "Available Selections" Column.
        - Move Required Files to "Recipients Column", and Select "Read CD.
      - To List CD Contents, Select "Contract Directory".
  - CD Operations->Forms.
    - Removed.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER
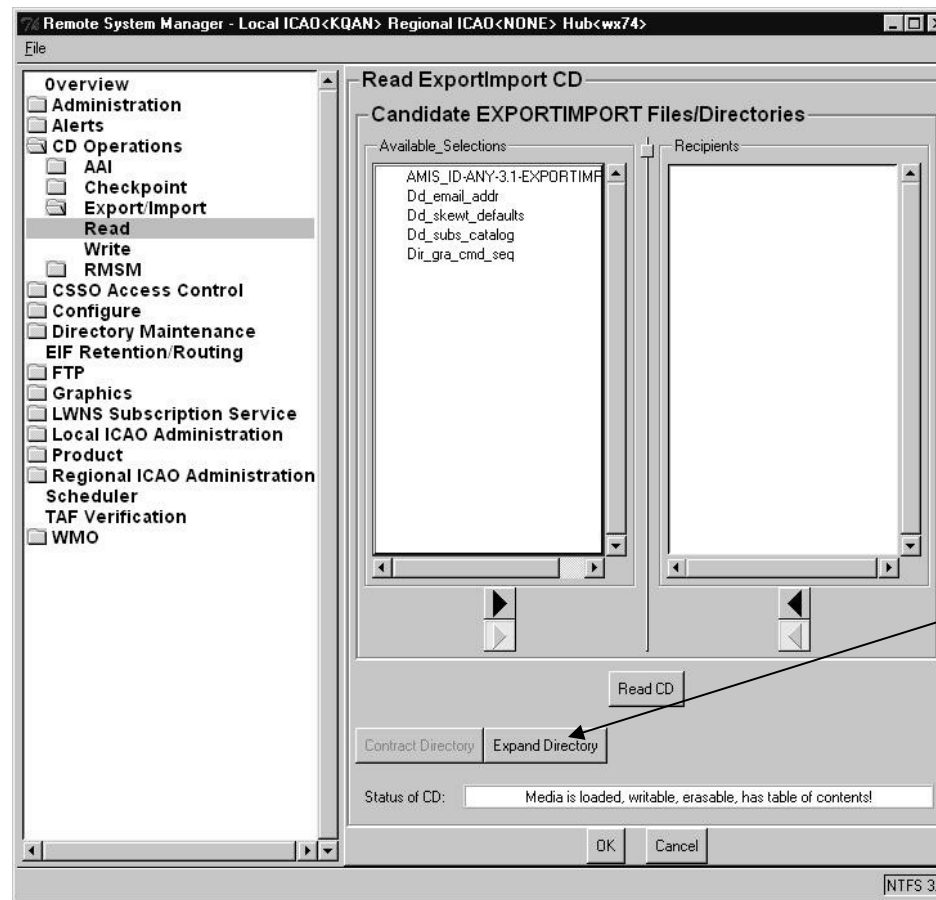
Expand Directory

Export/Import CD Read Options

TRAINING COURSE

UNIT 4: SYSTEM MANAGER
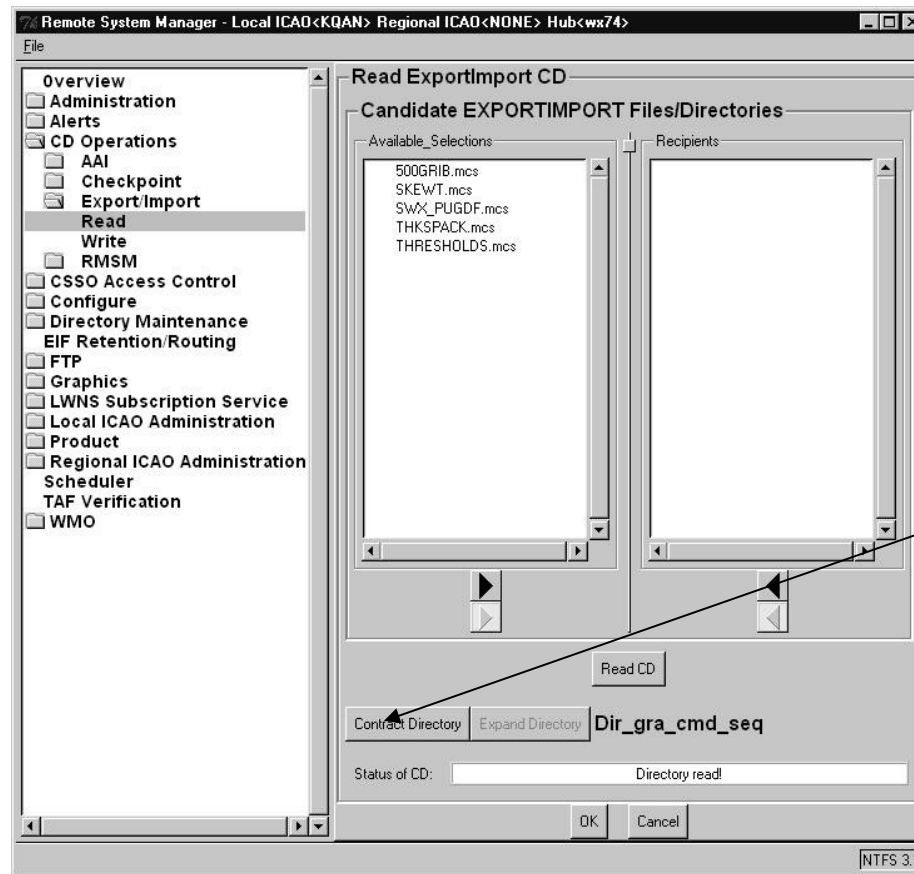
Contract Directory

Export/Import Read Options

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - Configure->Warning/Advisory Criteria.
    - Removed "route" Configuration Selection Under "Set" Options.
      - No Longer Required With "Regional" Routing.
  - Configure->Longline Parameters.
    - Selection Removed Due to SCOMP.
  - Directory Maintenance.
    - Added "Background Composites" Selection.
      - Hi-Resolution DTED Map Backgrounds.
      - Deletes "Definition" Only, Individual Components Still Available on Server.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER
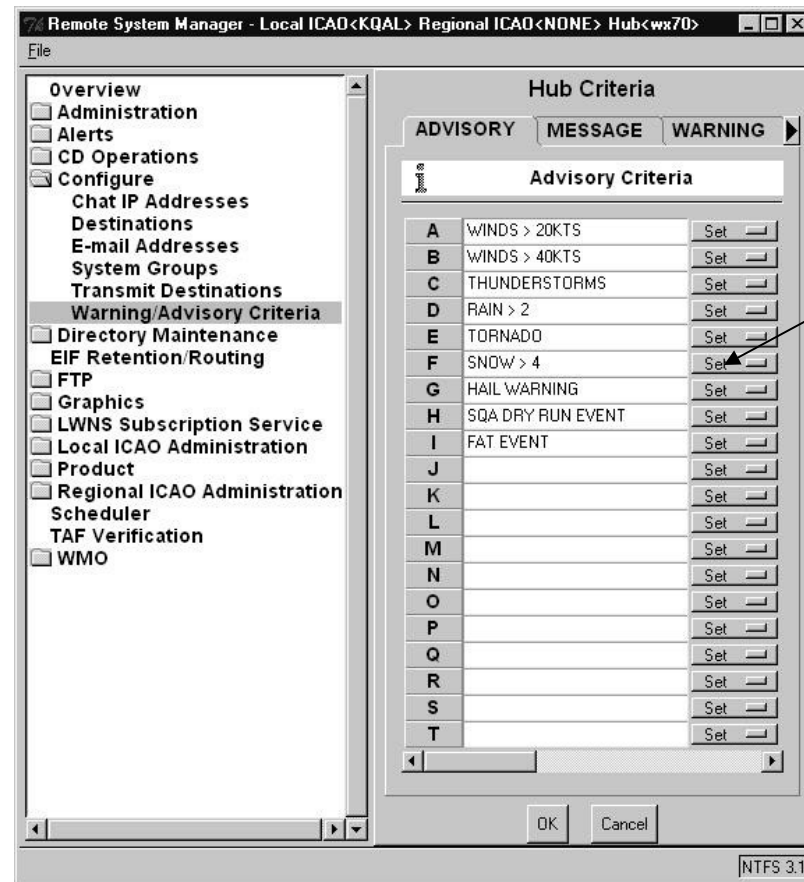
Set Options

Warning/Advisory Criteria Set Options

UNIT 4: SYSTEM MANAGER
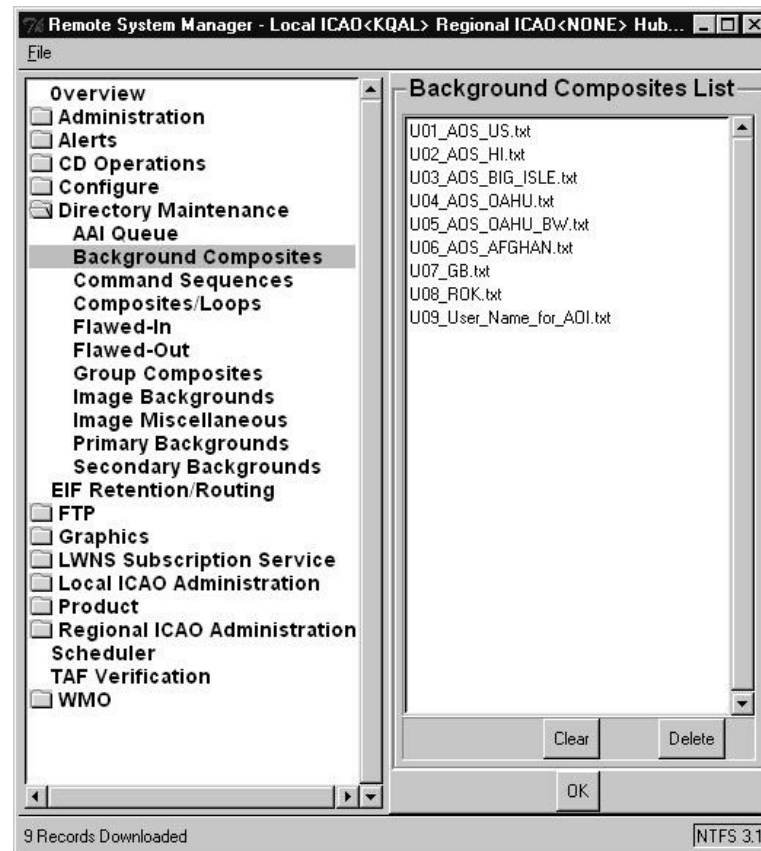
Background Composites Maintenance

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - Added Capability to FTP Fetch and Store GIDS Products From Another External System.
    - Configure via **FTP->Other Product Sources**.
  - Added Capability to FTP Fetch GIDS Products Stored on the NTFS Server.
    - Select **FTP->GIDS User Authorizations**.
      - **User Name**. Enter FTP Login Name.
      - **Password**. Enter FTP Login Password.
      - Select **Apply**.
    - Configure FTP Fetch Using GIDS Viewer GUI.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER
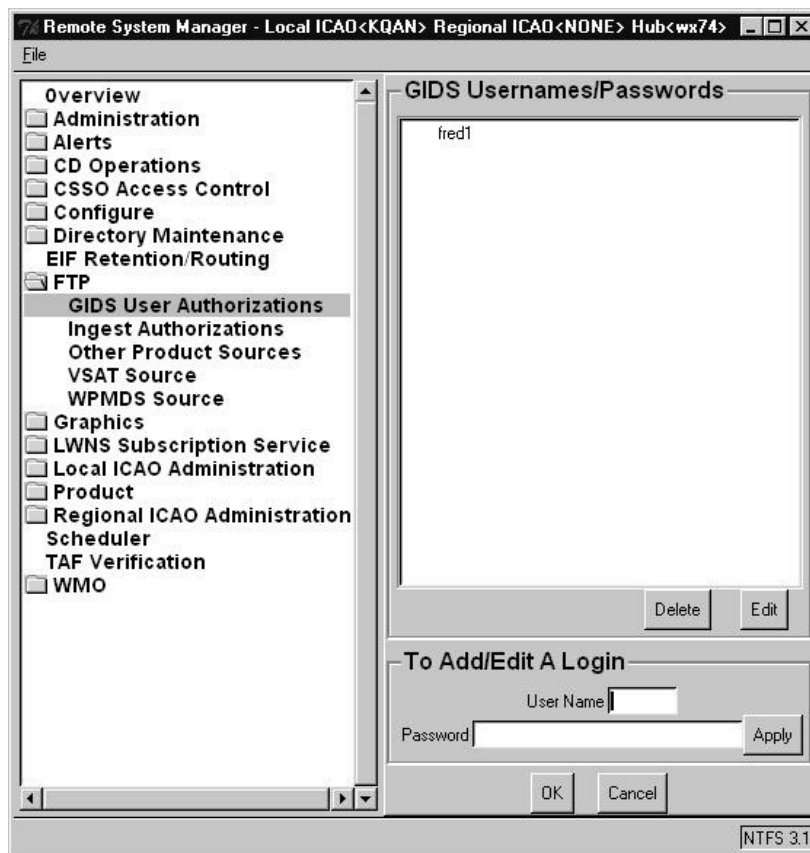
GIDS User Authorizations

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - FTP->Other Product Sources.
    - Added "Delete Fetched Files" Option.
      - Select "Yes" to Delete File(s) After Retrieval From Source (i.e., VCH).
  - Scheduler.
    - Under "Execute Macro" Action, Added List to Select Macro.
      - Double-Click Selection to Move Into "Name of Macro to Initiate" Field.

UNIT 4: SYSTEM MANAGER
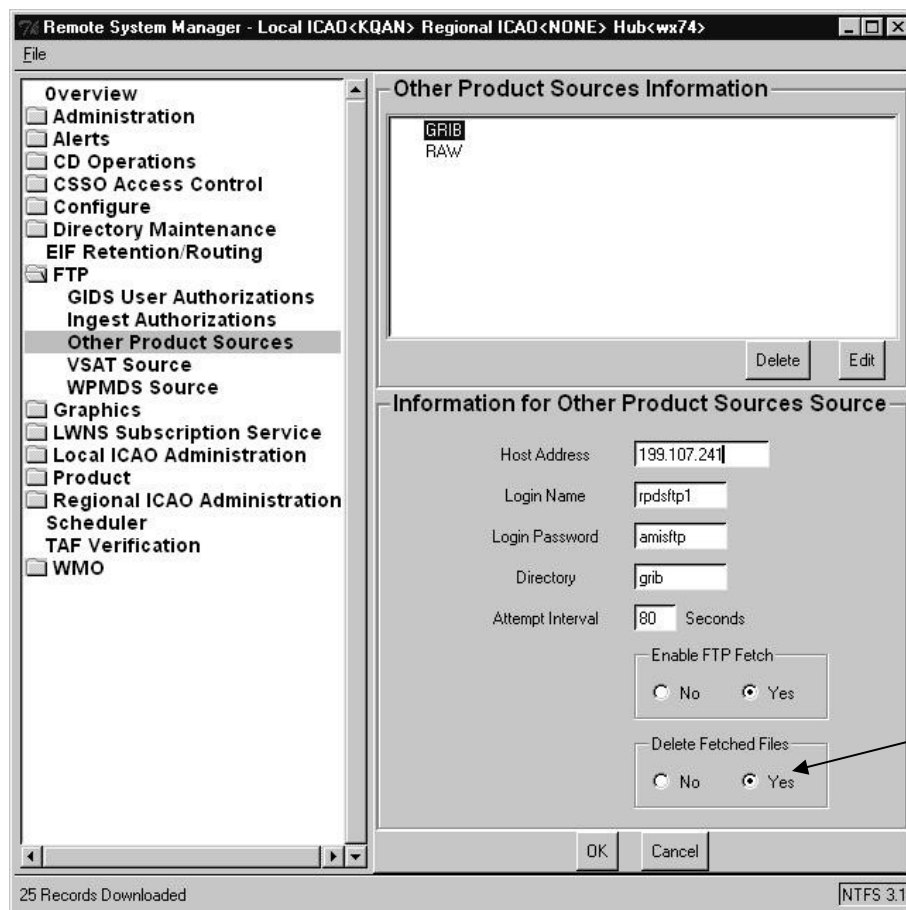
Delete Option

Delete Fetched Files Option

TRAINING COURSE

UNIT 4: SYSTEM MANAGER
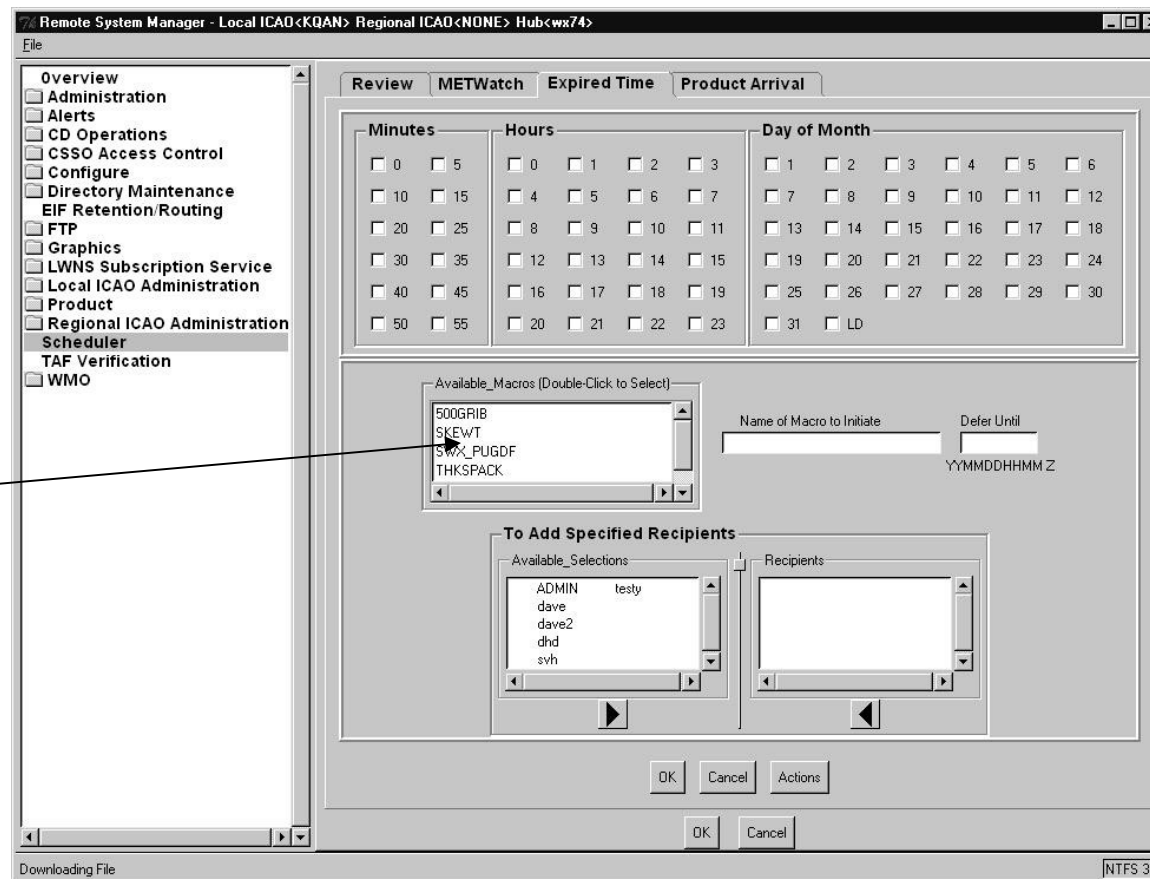
Macro List

Execute Macro List

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**

  - LWNS Subscription Service.

    - Active Positions.

    - Catalog Products - AlphaNumeric.

    - Catalog Products - Graphic.

    - Local ATC Alphanumeric Products.

    - Local ATC Graphic Products.

    - Local LOC Products.

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - LWNS Subscription Service.
    - **Active Positions -> Position** Tab - Defines the Number of Each Type LWNS Position.
      - LWNS/ATC - ATC and RAPCON Positions.
        - Creates 4-Character Position ID (LA**##**, LR**##**).
      - LWNS/LOC - CMD, OPS, and SOF Positions.
        - Creates 4-Character Position ID (LC**##**, LO**##**, LS**##**).
    - Select "Apply" When Number of Each Position is Completed.
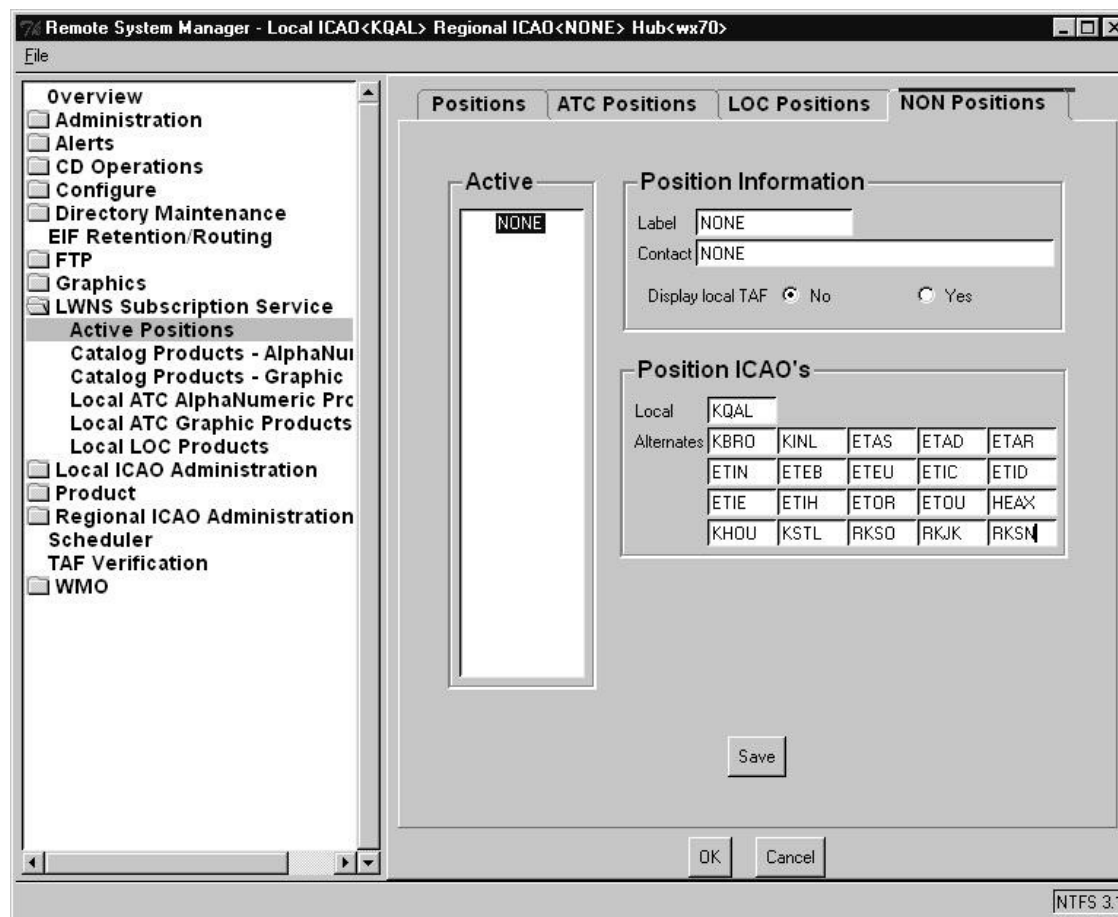
UNIT 4: SYSTEM MANAGER
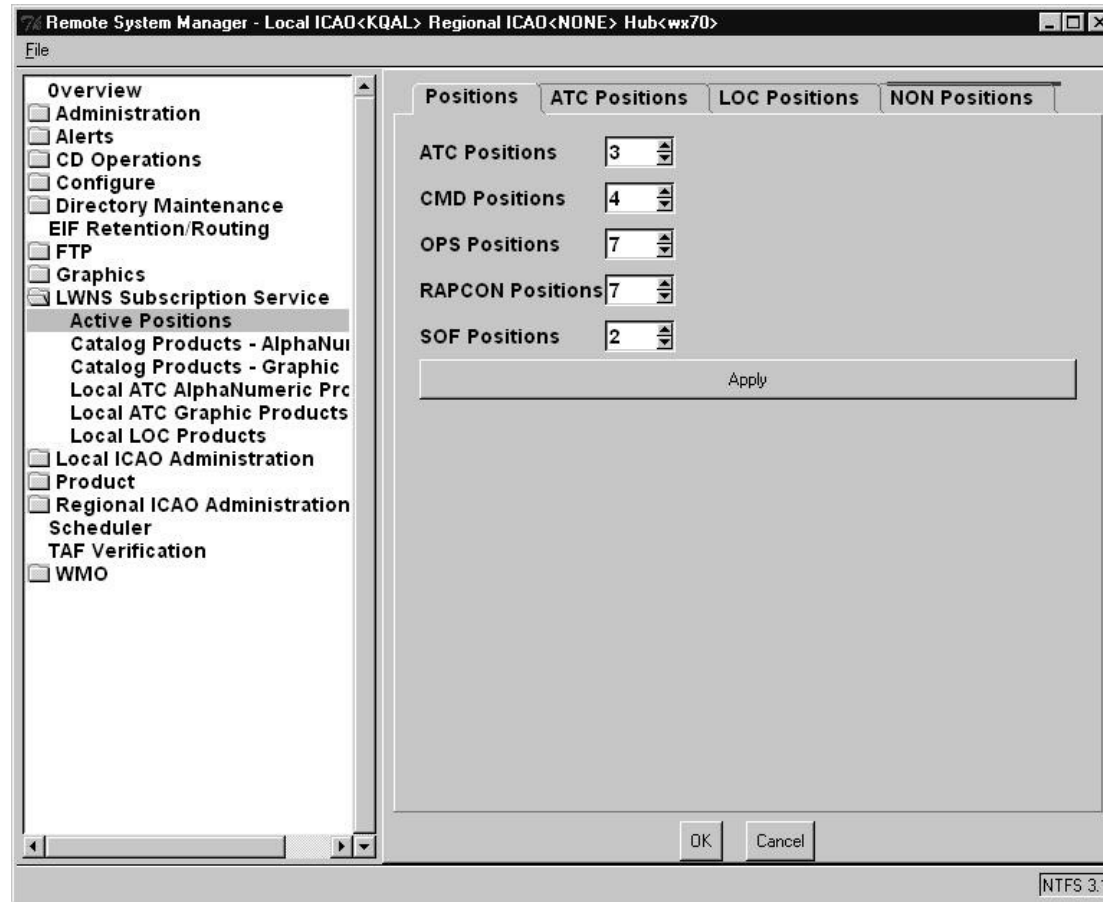
**Active Positions**

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - LWNS Subscription Service.
    - **ATC Positions** Tab - Defines ATC Position Information and ICAO's.
      - Highlight Each LA## and LR## Position.
        - Enter Label and Contact Information For Receipt Acknowledgement Report.
        - Enter Up to 5 Alternate ICAO's For Display.
        - Select "Save" After Each Position to Save Individual Information at Server.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER
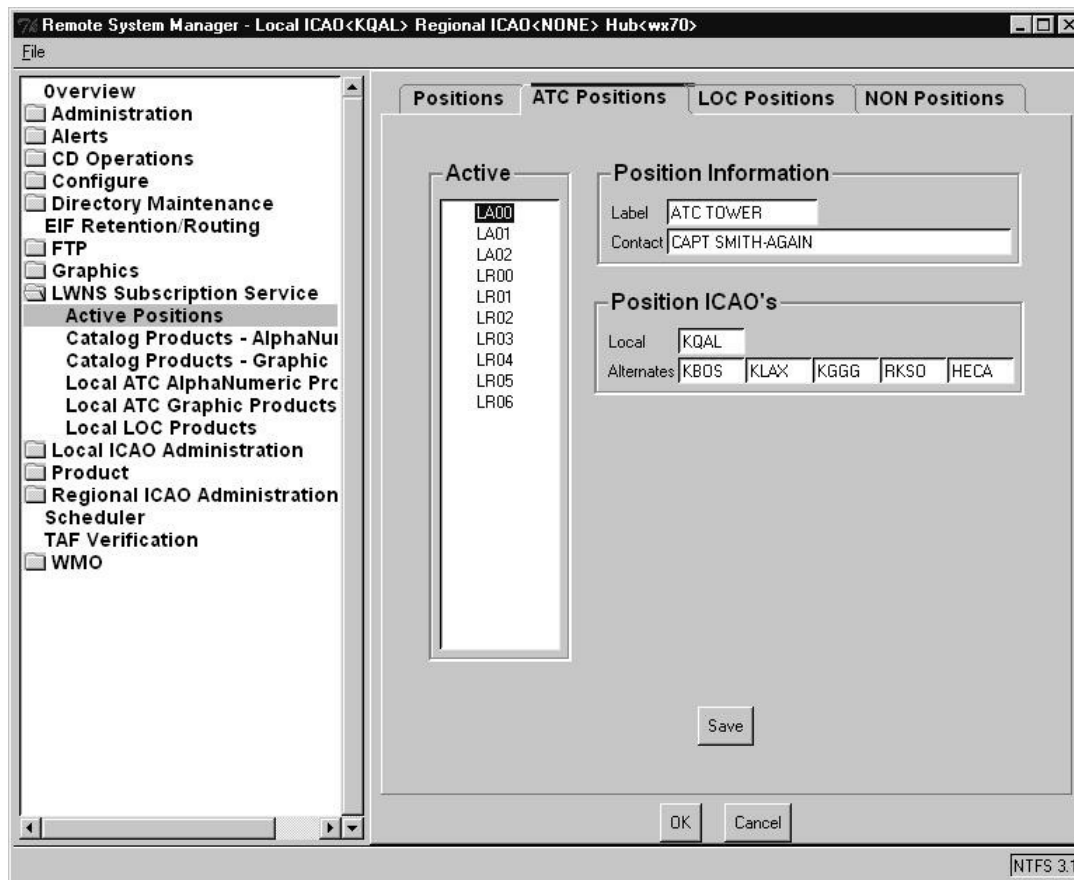
ATC Positions

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**

  – LWNS Subscription Service.

    - **LOC Positions** Tab - Defines LOC Position Information and ICAO's.

      – Highlight Each LC##, LO##, and LS## Position.

        - Enter Label and Contact Information For Receipt Acknowledgement Report.

        - Enter "Yes" or "No" Whether Local Default ICAO TAF is Displayed.

        - Enter Up to 20 Alternate ICAO's For Display.

        - Select "Save" After Each Position to Save Individual Information at Server.

UNIT 4: SYSTEM MANAGER

LOC Positions

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - LWNS Subscription Service.
    - **NON Positions** Tab - Defines the "No" Position Information and ICAO's.
      - Highlight the "NONE" Position.
        - Enter Label and Contact Information (Not Display on Receipt Acknowledgement Report).
        - Enter "Yes" or "No" Whether Local Default ICAO TAF is Displayed.
        - Enter Up to 20 Alternate ICAO's For Display.
        - Select "Save" to Save Information at Server.

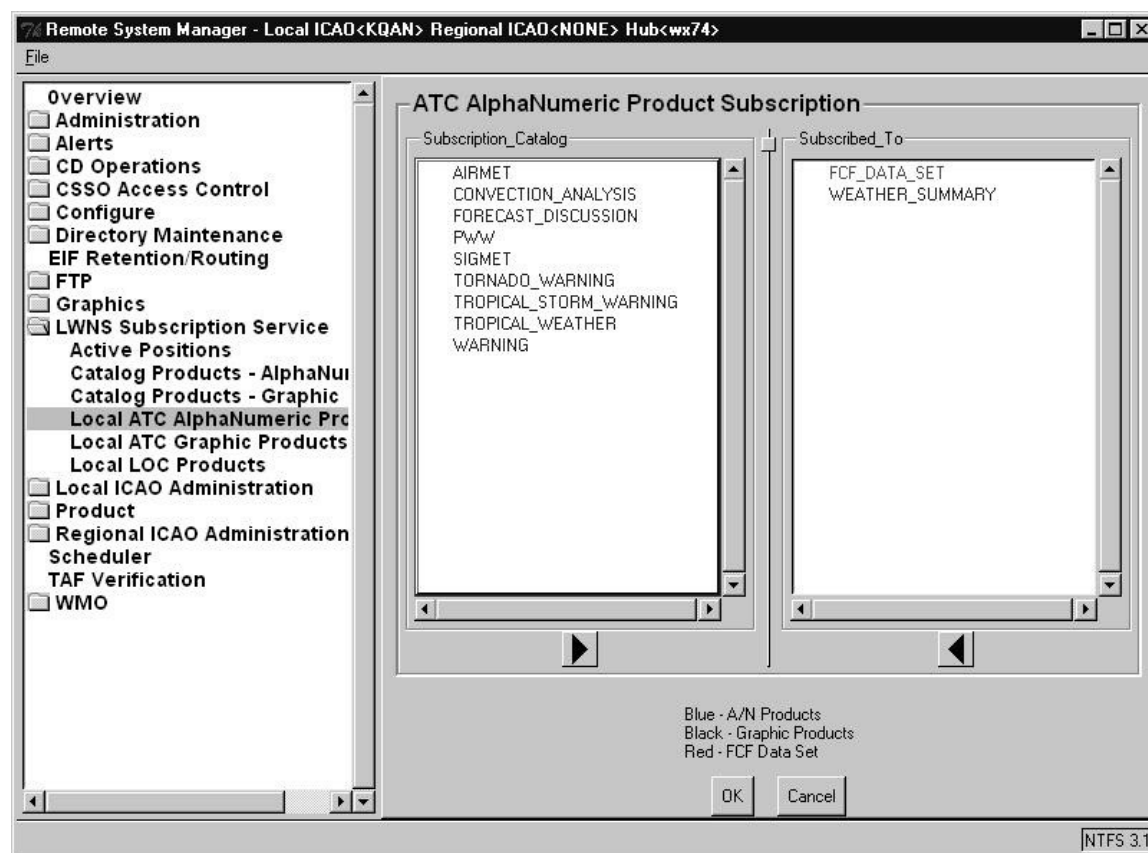# UNIT 4: SYSTEM MANAGER

NON Positions

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - LWNS Subscription Service.
    - **Catalog Products - AlphaNumeric** - Defines the A/N Products Available for Selection from the Product Catalog.
      - Pre-Loaded With Default A/N Catalog.
      - Enter 2-6 Character MANOP Header in MANOP Field.
      - Enter Plain Text Description of Product in Legend Field.
        - Will Be Used to Identify Product in Catalog and at LWNS/LOC Client.
      - Highlight Entry and Select "Edit" to Modify MANOP and/or Legend.
      - Highlight Entry and Select "Delete" to Remove Entry From A/N Catalog.
      - Select "Apply" to Save Information to Server.
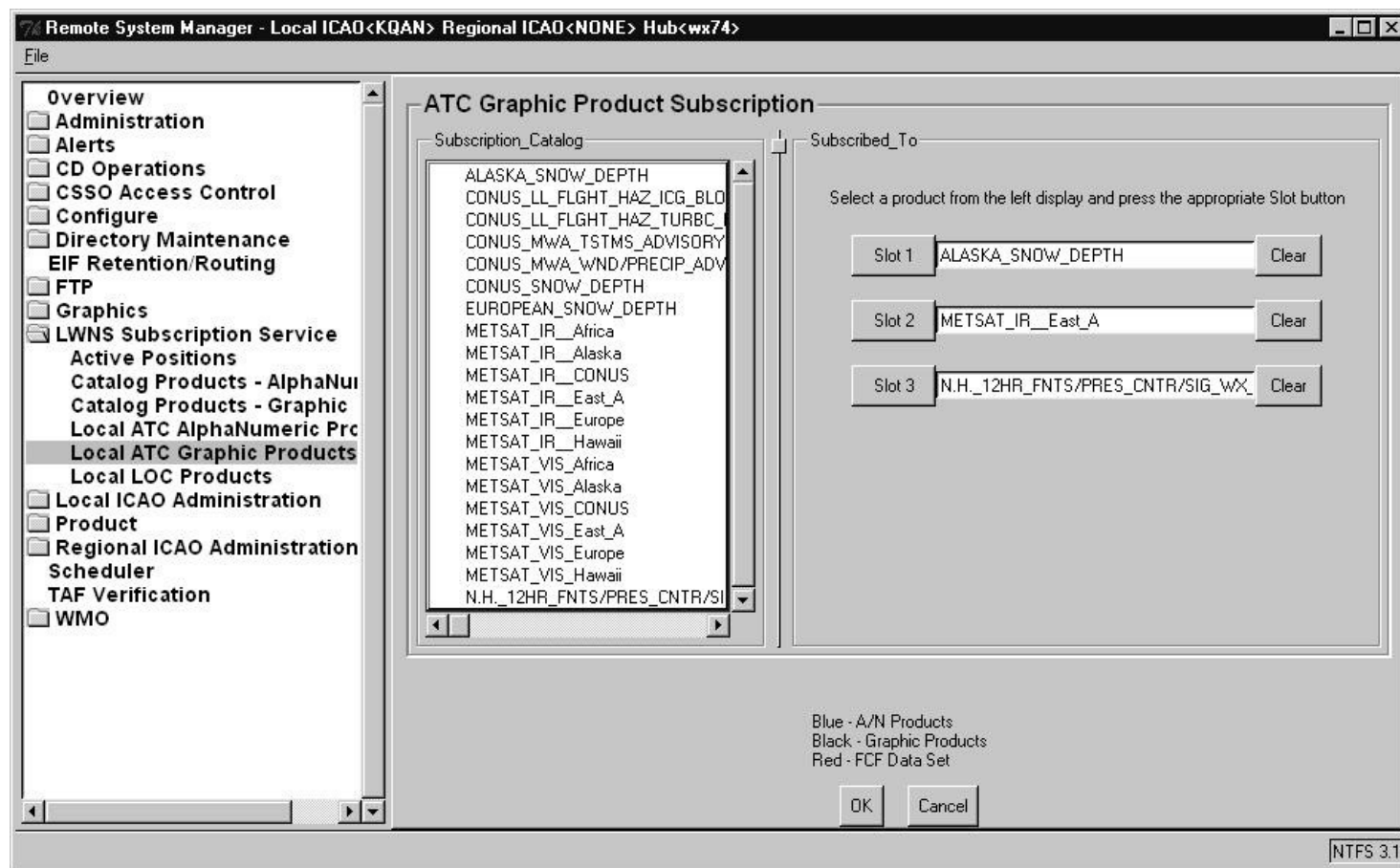
TRAINING COURSE

UNIT 4: SYSTEM MANAGER
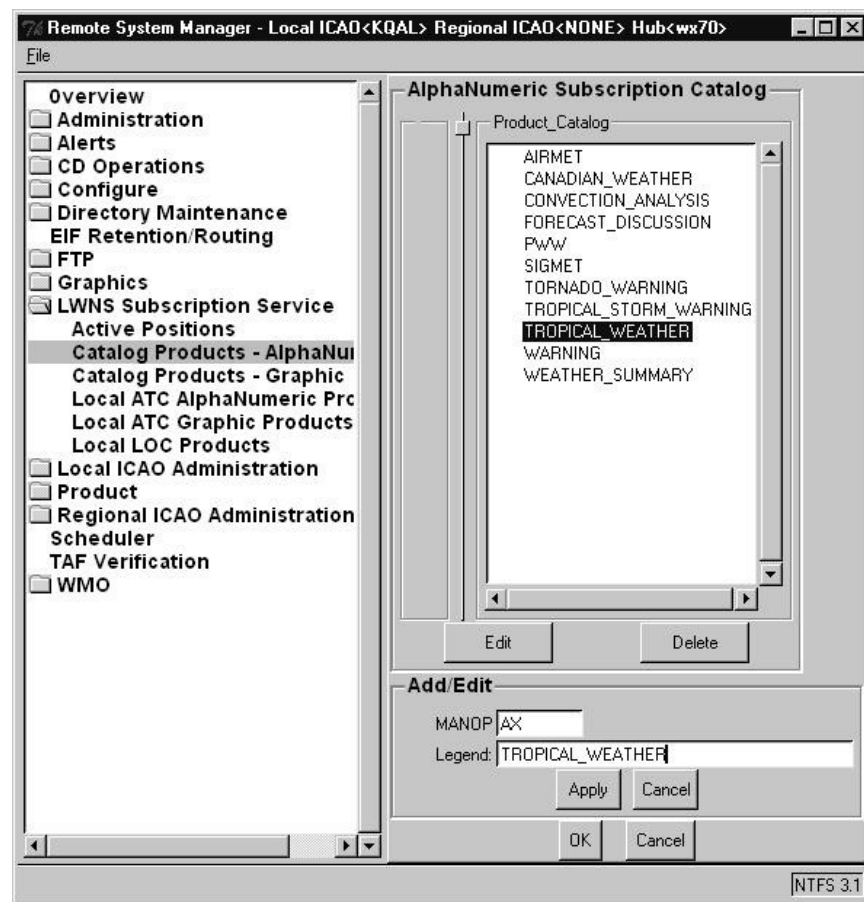
Catalog Products - AlphaNumeric

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - LWNS Subscription Service.
    - **Catalog Products - Graphic** - Defines the Graphic Products Available for Selection from the Product Catalog.
      - Pre-Loaded With Default Graphic Catalog.
      - Select Either "Product" or "Comp/Loop" to Search.
        - Will Clear **Search** Field.
      - Enter 2-10 Character PID or Composite/Loop Name in Search Field.
        - Product Legend or Composite/Loop Name Will Be Used to Identify Product in Catalog and at LWNS/LOC Client.
      - Select "Do Query".

TRAINING COURSE
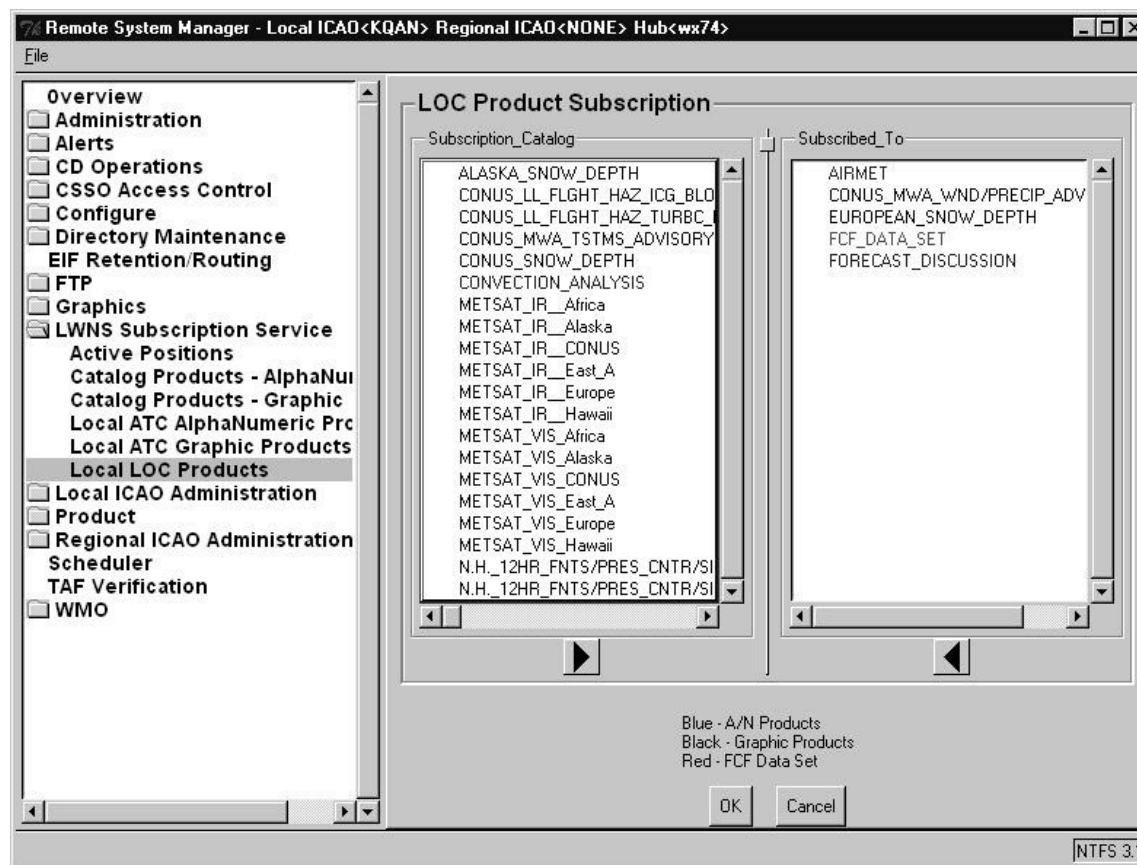
UNIT 4: SYSTEM MANAGER
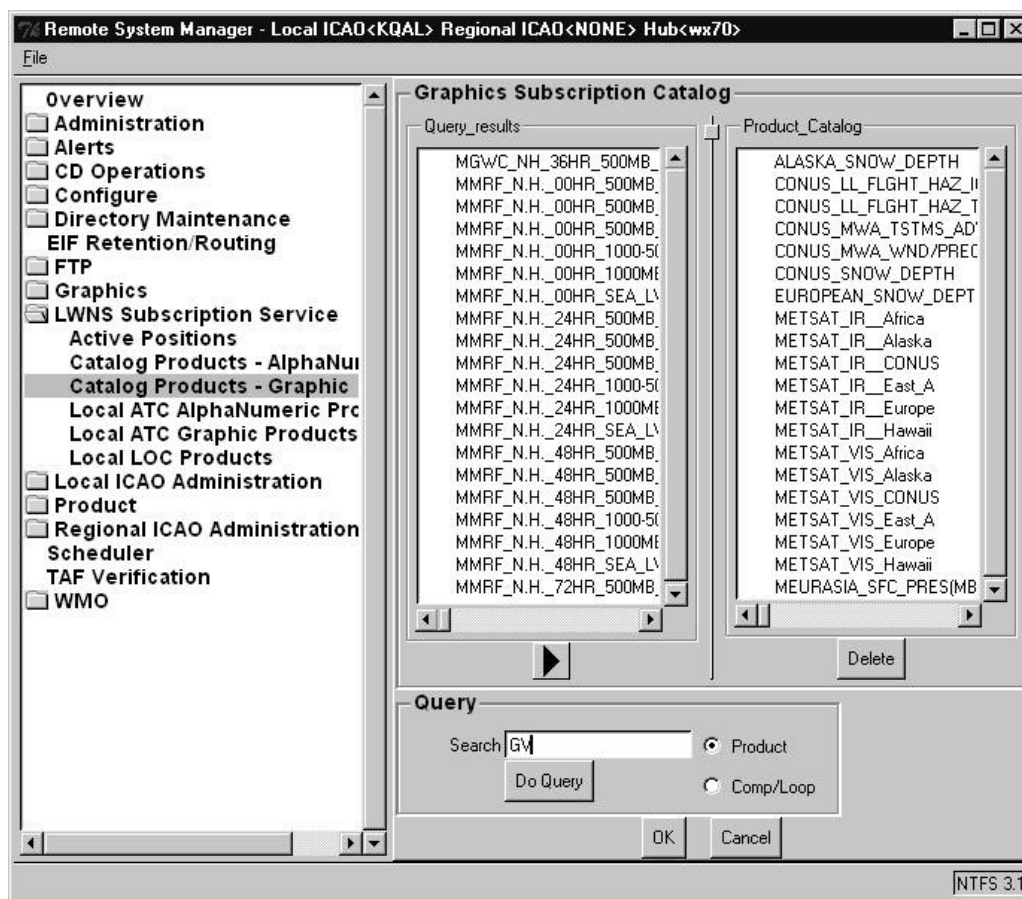
Catalog Products - Graphic

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - LWNS Subscription Service.
    - **Catalog Products - Graphic** - Defines the Graphic Products Available for Selection from the Product Catalog.
      - Query Results Are Displayed in "Query results" Column.
        - Double-Click, or Highlight and Select "Move Right" Arrow to Move Selection to Product Catalog Column.
      - Highlight and Select "Delete" to Remove Entry From Graphic Product Catalog.
      - Select "OK" to Save Information to Server.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - LWNS Subscription Service.
    - **Local ATC Alphanumeric Products** -Defines Those A/N Products From the A/N Catalog That the LWNS/ATC Clients Can Display.
      - To Select an A/N Product from the "Subscription Catalog" Column, Double-Click, or Highlight and Select "Move Right" Arrow to Move Selection to "Subscribed to" Column.
      - To Deselect an A/N Product from the "Subscribed to" Column, Double-Click, or Highlight and Select "Move Left" Arrow to Move Selection to "Subscribed Catalog" Column.
      - Select "OK" to Save to Server.

UNIT 4: SYSTEM MANAGER

Local ATC Alphanumeric Products

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - LWNS Subscription Service.
    - **Local ATC Graphic Products** - Defines Those Graphic Products From the Graphics Catalog That the LWNS/ATC Clients Can Display.
      - Up to 3 Graphics Products Can be Selected.
        - LWNS/ATC's Only Have Three Possible "Slots" to Display Graphics Products.
      - To Select a Graphic Product from the "Subscription Catalog" Column, Highlight and Select Which Slot to Display the Product.
      - To Deselect a Graphic Product from the "Subscribed To" Column, Select "Clear", or Select Another Graphic Product and Repeat the Selection Process.
      - Select "OK" to Save to Server.

UNIT 4: SYSTEM MANAGER

Local ATC Graphic Products

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - LWNS Subscription Service.
    - **Local LOC Products**. Defines Those A/N and Graphic Products From the A/N and Graphic Catalog That the LWNS/LOC Clients Can Choose and Display.
      - To Select Product from the "Subscription Catalog" Column, Double-Click, or Highlight and Select "Move Right" Arrow to Move Selection to "Subscribed to" Column.
      - To Deselect Product from the "Subscribed to" Column, Double-Click, or Highlight and Select "Move Left" Arrow to Move Selection to "Subscribed Catalog" Column.
      - Select "OK" to Save to Server.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER

Local LOC Products

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - Local ICAO Administration.
    - Added Capability to Change the Default Primary Local ICAO.
    - Selection Available Only at the NTFS Server.
      - Select "Change Primary".
        - New Primary ICAO Panel is Displayed.
      - Enter New ICAO in "Enter New Primary ICAO".
      - Select "OK".
      - Perform a Shutdown and Reboot of the NTFS Server, C/DM, and All Clients.
    - Use This Capability Only When Directed by AFWA.

UNIT 4: SYSTEM MANAGER
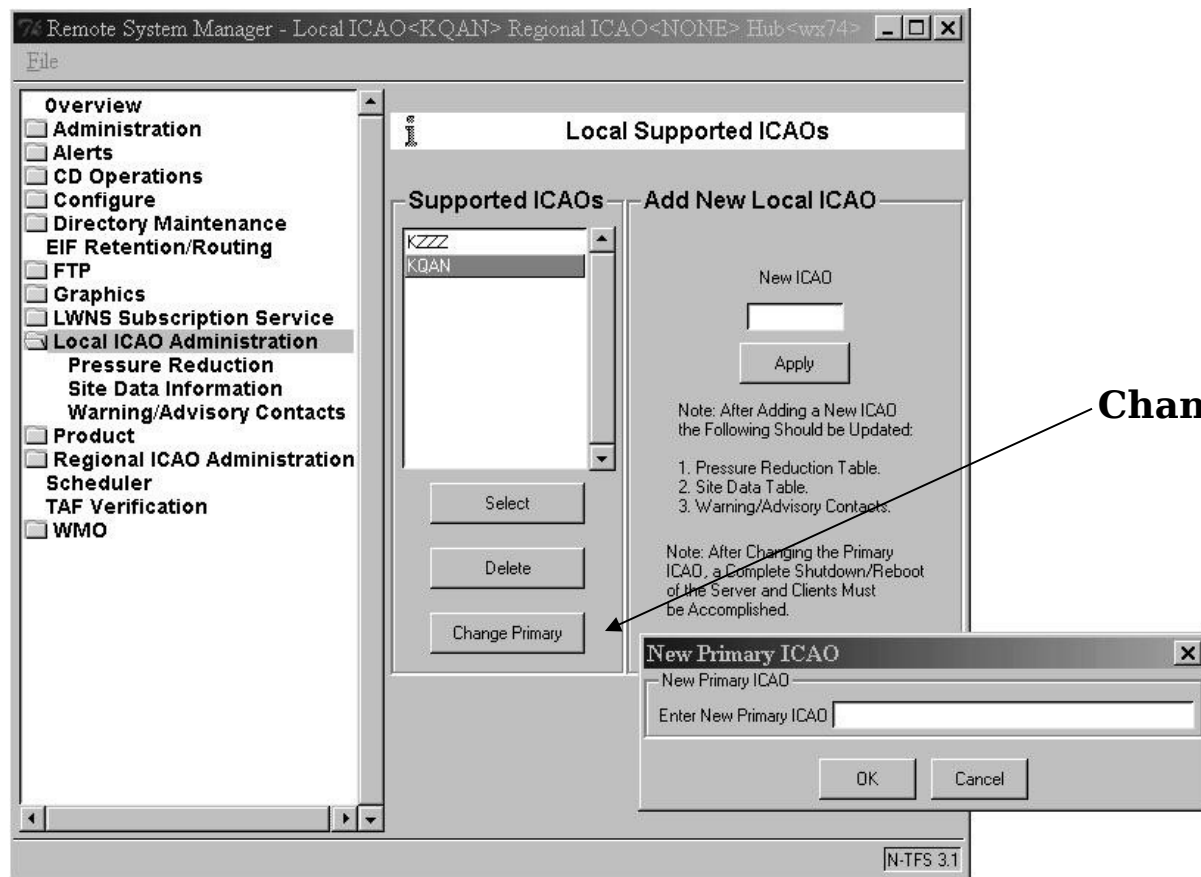
Change Primary ICAO

Local Supported ICAOs

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - Local ICAO Administration->Site Data Information.
    - Under "Misc." Tab, Added "ATC TYPE" Selection (for Default ICAO Only).
      - "FAA" or "USAF" Options Available.
        - "FAA" - LWNS/ATC's Will Display and Merge Received External Observations Converted to Local Format (i.e., Stand-Alone LWNS Servers).
        - "USAF" - LWNS/ATC's Will Display and Merge Local Observations as Done Today.

TRAINING COURSE
UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - Local ICAO Administration->Site Data Information.
    - Under "Misc." Tab, Added AFCCC Email Addresses Entries for Form 3813 Information Transmission.
      - Enter Primary and Secondary AFCCC Email Address in "1st AFCCC E-mail Address" and "2nd AFCCC E-mail Address" Fields.
      - Enter From Email Address in "AFCCC E-mail Return" Field.

UNIT 4: SYSTEM MANAGER

ATC Type Selection

TRAINING COURSE

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - Product->Nitf Stage.
    - Allows Products to be Automatically Transmitted in National Imagery Transmission Format (NITF).
      - Enter 2-10 Character Internal or External Graphic PID in "2-10 Char Int/Ext Graphic PID" Field.
        - Only Image and Vector Graphic Product PIDs are Allowed (i.e., GV, GS, DS, etc).
      - Select "Apply".
        - The "To Add Recipients" Panel Appears.
        - Only Destinations Configured for NITF Format are Listed.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER

- ## **Remote System Manager (RSM).**
  - – Product->Nitf Stage.
    - Allows Products to be Automatically Transmitted in National Imagery Transmission Format (NITF).
      - To Select Destination from the "Available Selections" Column, Double-Click, or Highlight and Select "Move Right" Arrow to Move Selection to "Recipients" Column.
      - To Deselect Destination from the "Recipients" Column, Double-Click, or Highlight and Select "Move Left" Arrow to Move Selection to "Available Selections" Column.
      - Select "OK" to Save to Server.
      - To Edit PID, Highlight PID and Select "Edit".
      - To Delete PID, Highlight PID and Select "Delete".

TRAINING COURSE

UNIT 4: SYSTEM MANAGER
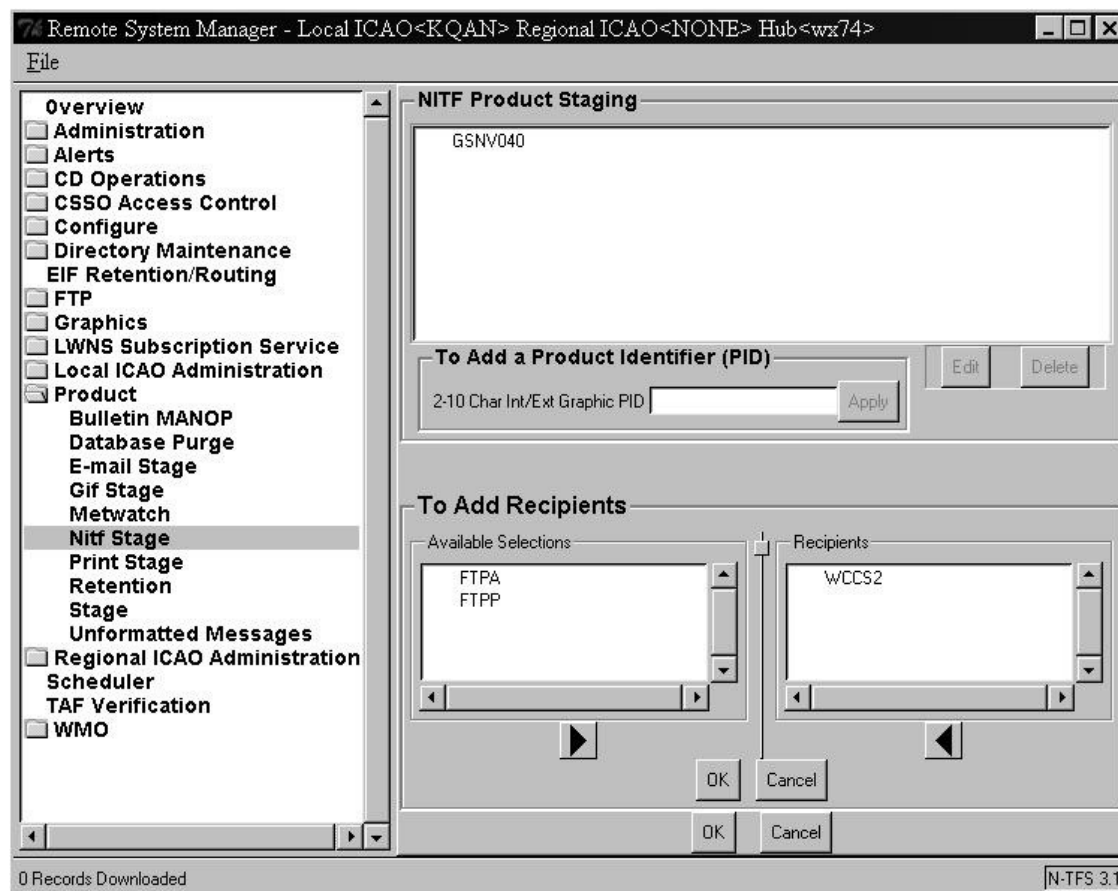
NITF Product Stage

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - Regional ICAO Administration->Site Data Information.
    - Under "Network" Tab, Added LWDS Server IP Addresses and Port Number Entries for Retrieving CWT LWDS.
      - Enter LWDS Server Address (CWT) and Port (CWT) in "LWDS Server Address" and "LWDS Server Port" Fields.
      - Enter LWDS Server Proxy Address (CWT) and Port (CWT) in "LWDS Server Proxy Address" and "LWDS Server Proxy Port" Fields (Optional).
      - Select "Normal" (Non-SSL) or "Secure" (SSL) for LWDS Server Security Setting (CWT).

UNIT 4: SYSTEM MANAGER

LWDS Server Configuration

TRAINING COURSE
UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - TAF Verification.
    - To Select ICAO from the "Available_ICAO's" Column, Double-Click, or Highlight and Select "Move Right" Arrow to Move Selection to "Selected_ICAO's" Column.
      - To Deselect ICAO from the "Selected_ICAO's" Column, Double-Click, or Highlight and Select "Move Left" Arrow to Move Selection to "Available_ICAO's" Column.
    - Highlight Desired ICAO in the "Selected_ICAO's" Column, Editing Buttons Become Active.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER
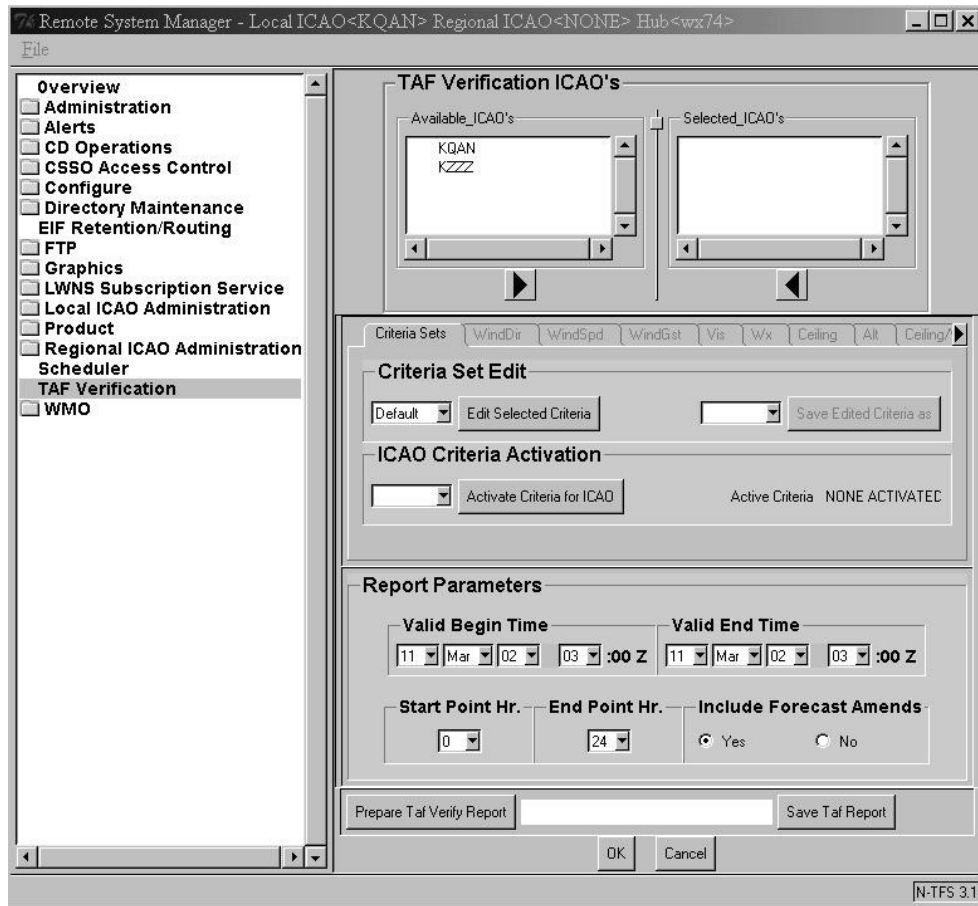
TAF Verification

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - TAF Verification.
    - Criteria Set Edit. Allows Prefined Criteria Sets to be Edited and Saved as up to 5 Unique Criteria Sets.
      - From the **Edit Selected Criteria** Pull-Down List, Select a Predefined Criteria Set, and Select the **Edit Selected Criteria** Button, the Criteria Tabs Become Active.
      - In the Criteria Tabs, Configure the Desired Parameters with the Required Criteria.
        - For the "Ext/Int" Tab, Select to Use External (AWN-Comebacks) or Internal (Local) Observations, Select "Set Type of TAF/OBS to use".
      - From the **Save Edited Criteria as** Pull-Down, Select a User-Defined Criteria Name to Save the Criteria.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER
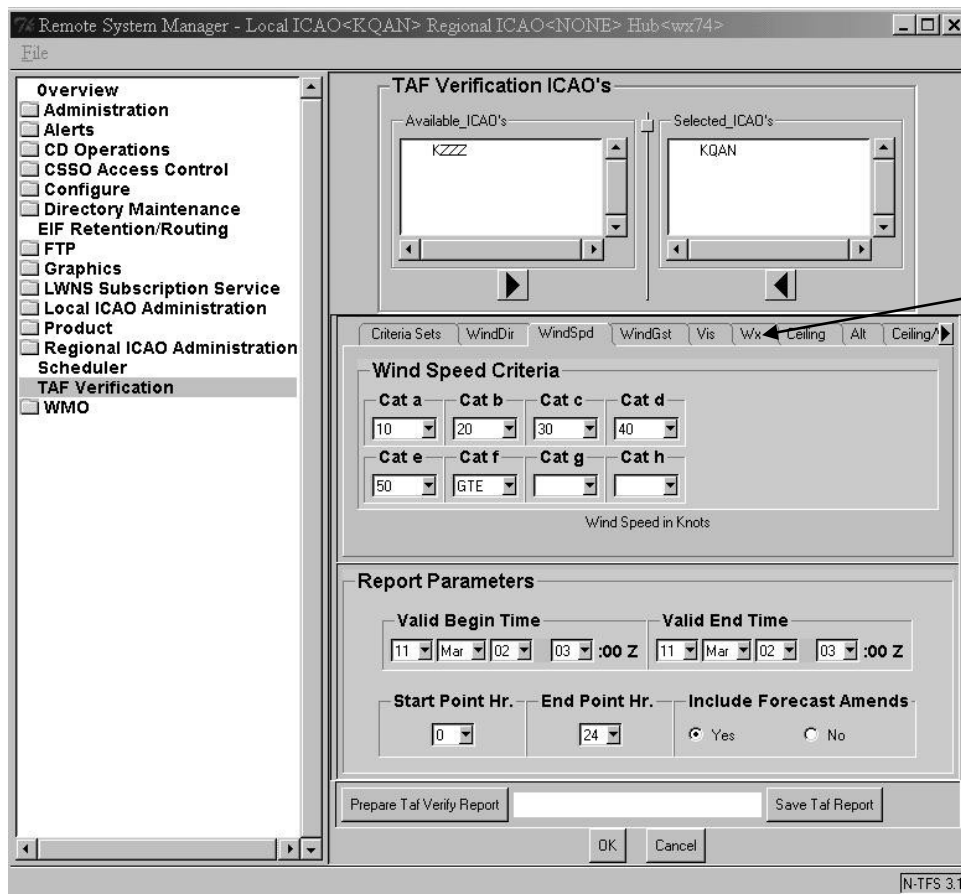
Criteria Tabs

TAF Verification

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - TAF Verification.
    - ICAO Criteria Activation. Activates Which Criteria Set is Used During the Verification.
      - From the **Activate Criteria for ICAO** Pull-Down, Select the Criteria to be Used for the Verification.
      - Select **Activate Criteria for ICAO**, the Active Criteria Will be Displayed.

TRAINING COURSE

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - TAF Verification.
    - Report Parameters. Defines the Forecast Time Period of the Verification.
      - Select the "Valid Begin Time" and "Valid End Time" for the Verification Report.
      - Select the "Start Point Hr." and "End Point Hr." for the Forecast Hour Range of Each TAF Included in the Verification.
        - To Perform a Single Point Forecast Verification Report, Configure Both Hours With the Same Value.
      - Select **Yes** or **No** if Forecast Amendments are Included in the Verification.

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - TAF Verification.
    - Select **Prepare Taf Verify Report** to Perform the Verification Using the ICAO(s) and Parameters Configured.
      - May Take Several Minutes.
      - An Urgent Alert Will be Displayed at the NTFS Client Launch Pad When the Report is Completed.
    - To Save the Report Data, Select **Save Taf Report**, the "Save As" Window is Display.
      - Enter Unique Name, and Select **Save**.
      - Available Only at the NTFS Client.

UNIT 4: SYSTEM MANAGER

- **Remote System Manager (RSM).**
  - TAF Verification.
    - To View the Report, Display in a Spreadsheet Application (i.e., Excel), Using Comma Delimited Fields.
      - Refer to NTFS 3.1.1 Users Manual for Explanation of Fields, Skill Scores, and Rules.

UNIT 4: SYSTEM MANAGER

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	KLAX using Default Forecast: 26-Nov-01-01 Verification Hours: 00-23															
2	Parameter	Cat	Value	F-YY	F-YN	F-NY	F-NN	P-YY	P-YN	P-NY	P-NN	TOT-F	F-HITS	P-HITS	FA	PA
3	alt	a	0.05	2	0	22	0	0	2	0	22	24	2	22	0.08	0.92
4	ceil	a	200	1	5	1	17	6	0	18	0	24	18	6	0.75	0.25
5	ceil	b	1000	1	4	8	11	0	5	0	19	24	12	19	0.5	0.79
6	ceil	c	3000	1	3	1	19	0	4	0	20	24	20	20	0.83	0.83
7	ceil	d	GTE	3	6	8	7	0	9	0	15	24	10	15	0.42	0.62
8	combo	a	0200/0800	0	18	0	6	0	18	0	6	24	6	6	0.25	0.25

TAF Verification Report

UNIT 5: CSSO

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->AOS Configure.
    - Added "AUTO OBS" and "SNR" Tabs.
    - Changed "Server" Tab to "Export" Tab.
    - Removed "TACMET"/"STANDARD" Toggle.
    - Moved SNR Source Entry Information to "SNR" Tab.
  - If Any Information Is Changed in Any AOS Configure Tab, Select "Restart Server and SPY with New Settings".

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->AOS Configure.
    - **Export** Tab Defines Those NTFS Servers (OWS) Allowed to Retrieve Your (CWT) AOS Data.
      - Enter the IP Address(es) in "Export Host IP Address" Fields.
        - Highlight Entry and Select "Edit" to Modify IP Address(es).
        - Highlight Entry and Select "Delete" to Remove IP Address(es).
      - Select "Apply" to Add Information to Address List.
      - Select "OK" to Save to Server.
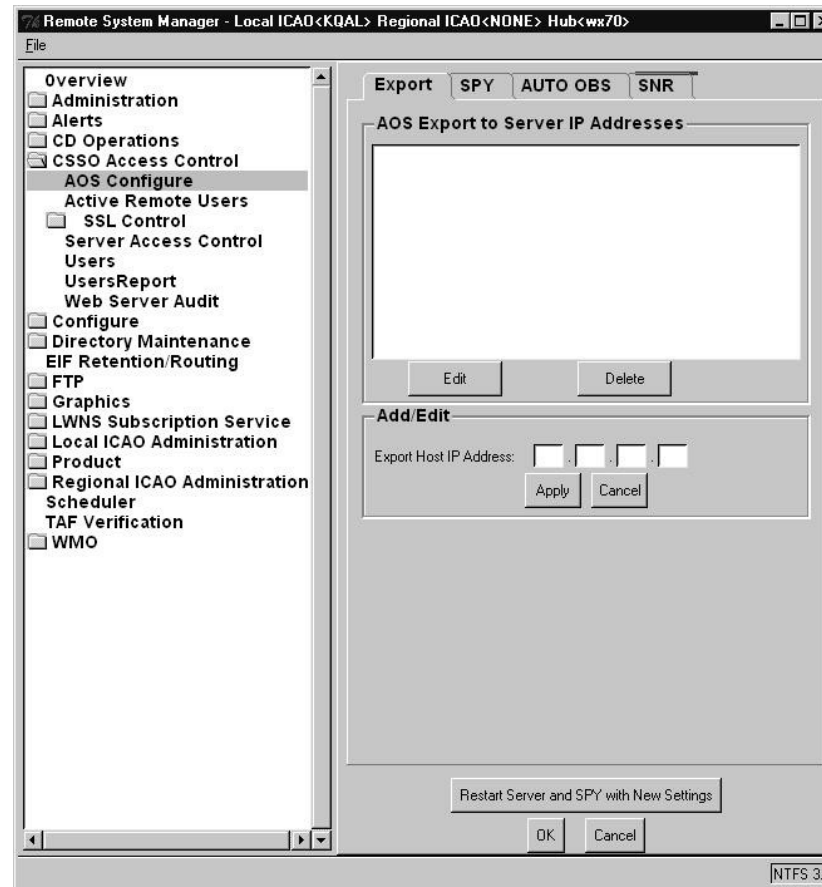
UNIT 5: CSSO

AOS Configure->Export

UNIT 5: CSSO

- **CSSO.**

  – CSSO Access Control->AOS Configure.

    - For OWS's, the **SPY** Tab Defines Those NTFS Servers (CWT's) Which Your Server (OWS) Will Retrieve AOS Data (Using the "Spy" Program).

    - For CWT's, the **SPY** Tab Defines the ICAO of the AOS Data Received From Your Sensor (SNR), or Data Collection Unit (DCU) Computer.

    - For Both OWS's and CWT's, the **SPY** Tab Also Defines the Location of the Sensor Database (SDB).

TRAINING COURSE
UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->AOS Configure.
    - **SPY** Tab (OWS) Defines Those NTFS Servers (CWT's) Which Your Server (OWS) Will Retrieve AOS Data (SPY).
      - Enter the CWT Proxy IP Address in "Source Proxy IP Address" Fields (Optional).
      - Enter the CWT Proxy Port Number in "Port" Field (Optional).
      - Enter the CWT IP Address in "Source Host IP Address" Fields.
      - Enter the CWT Port Number in "Port" Field.
      - Select **Normal** if CWT is Not Using SSL, or **Secure** if CWT Server is Using SSL.
      - Enter the ICAO, Magnetic Declination, and Site Elevation of Each CWT ICAO You Will Receive AOS Data.

TRAINING COURSE
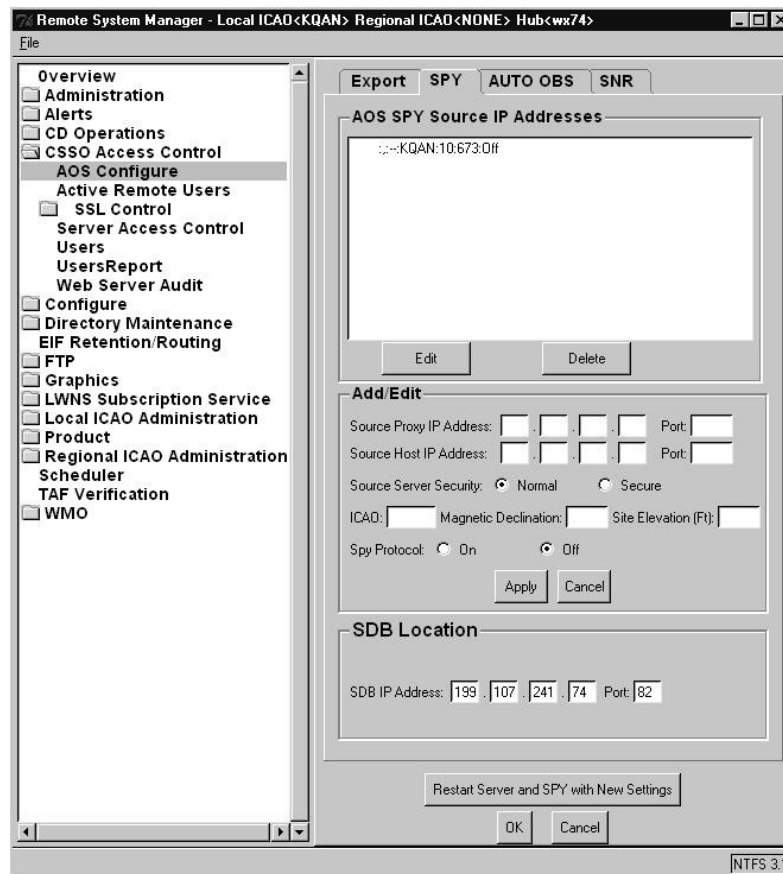
UNIT 5: CSSO

} SPY IP Address(es)

} ICAO Entry

} SDB IP Address

AOS Configure->SPY

UNIT 5: CSSO

- **CSSO.**

    - CSSO Access Control->AOS Configure.
        - **SPY** Tab (OWS) Defines Those NTFS Servers (CWT's) Which Your Server (OWS) Will Retrieve AOS Data (SPY).
            - Turn Spy Protocol "On" (OWS).
            - Select "Apply" to Add Information to Address List.
            - Define the IP Address of the Sensor Database (SDB) Where the AOS Data is Stored (Usually Your Own NTFS Server).
                - Enter the (OWS) IP Address in "SDB IP Address" Fields.
                - Enter the (OWS) Port Number in "Port" Field.
        - Select "OK" to Save to Server.

TRAINING COURSE
UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->AOS Configure.
    - **SPY** Tab (CWT) Defines the ICAO of the AOS Data Received From Your Sensor (SNR), or Data Collection Unit (DCU) Computer.
      - Enter the ICAO, Magnetic Declination, and Site Elevation of Your ICAO.
      - Turn Spy Protocol "Off" (CWT's).
      - Select "Apply" to Add Information to Address List.

TRAINING COURSE

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->AOS Configure.
    - **SPY** Tab (CWT) Defines the ICAO of the AOS Data Received From Your Sensor (SNR), or Data Collection Unit (DCU) Computer.
      - Define the IP Address of the Sensor Database (SDB) Where the AOS Data is Stored (Usually Your Own NTFS Server).
        - Enter the IP Address in "SDB IP Address" Fields.
        - Enter the Port Number in "Port" Field.
      - Select "OK" to Save to Server.

TRAINING COURSE

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->AOS Configure.
    - **AUTO OBS** Tab Controls the Creation of Automatic Observations From AOS Data.
      - Highlight ICAO to Create Automatic Observations From Sensor Data, Select **Edit**.
    - **Times** Tab Controls the Basic Creation Function.
      - Select Whether Automatic Observation Generations are To be "On" or "Off" (Default is "Off").
      - Enter When the Auto-Obs METAR is to Be Generated in Minutes Past the Hour (Default is "55" Minutes).
      - Define the Period of the Day When Auto-Obs METARs are to Be Generated.
        - Start Hour and Until Hour (Default is "0000" to "2400").

TRAINING COURSE

UNIT 5: CSSO
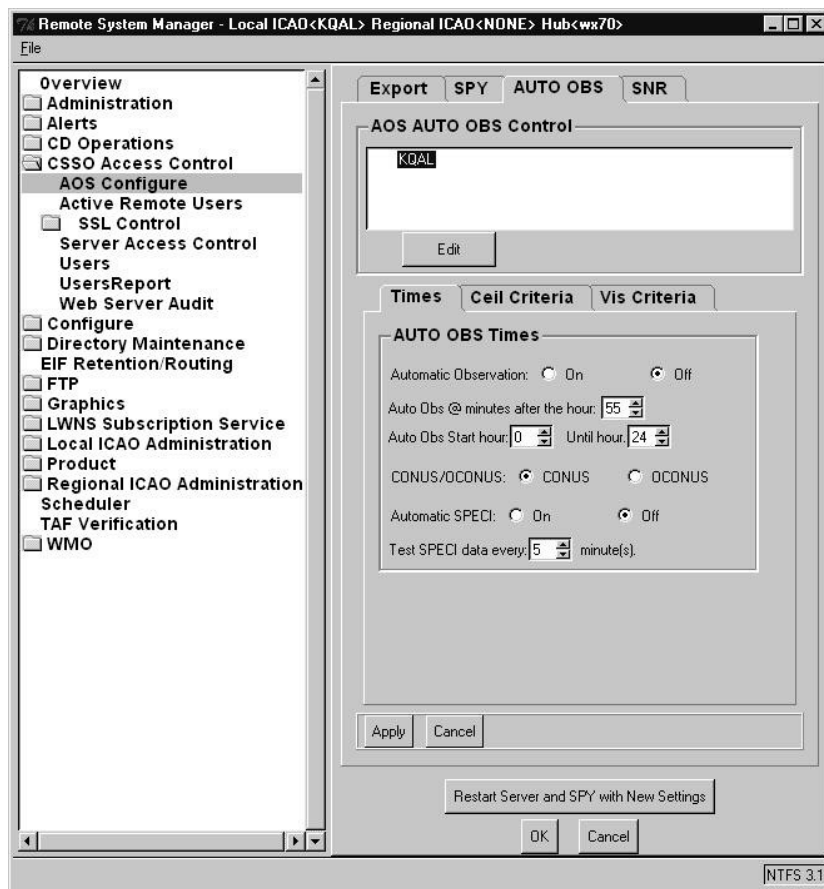
AOS Configure->AUTO OBS->Times

UNIT 5: CSSO

- **CSSO.**
    - CSSO Access Control->AOS Configure.
        - **Times** Tab Controls the Basic Creation Function.
            - Select Whether Observation is CONUS or OCONUS.
                - Used for Unit Selection in TACMET Interface.
            - Select Whether Automatic SPECI Observation Generations are To be "On" or "Off" (Default is "Off").
            - Select Interval to Test for SPECI Criteria
                - If Met, a SPECI Observation is Transmitted.
            - Select "Apply" to Add Information to Address List.
            - Select "OK" to Save to Server.

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->AOS Configure.
    - **Times** Tab Controls the Basic Creation Function.
      - Observation is Transmitted to Whatever Default Transmit Destination is Configured.
        - RSM->**Configure->Transmit Destinations**.
        - For Standard AOS Configuration, Only PRESSURE, WINDS, TMP/DPT is Formatted and Transmitted.

UNIT 5: CSSO

- **CSSO.**

  - CSSO Access Control->AOS Configure.

    - **Ceil Criteria** Tab Controls the SPECI Tests Perform for Ceiling.

      - Select Active or Disabled for the Standard Set of Ceiling Criteria.

      - Select Unique Ceiling Criteria from Pulldown List.

      - Select "Apply" to Add Information to Address List.

      - Select "OK" to Save to Server.

TRAINING COURSE
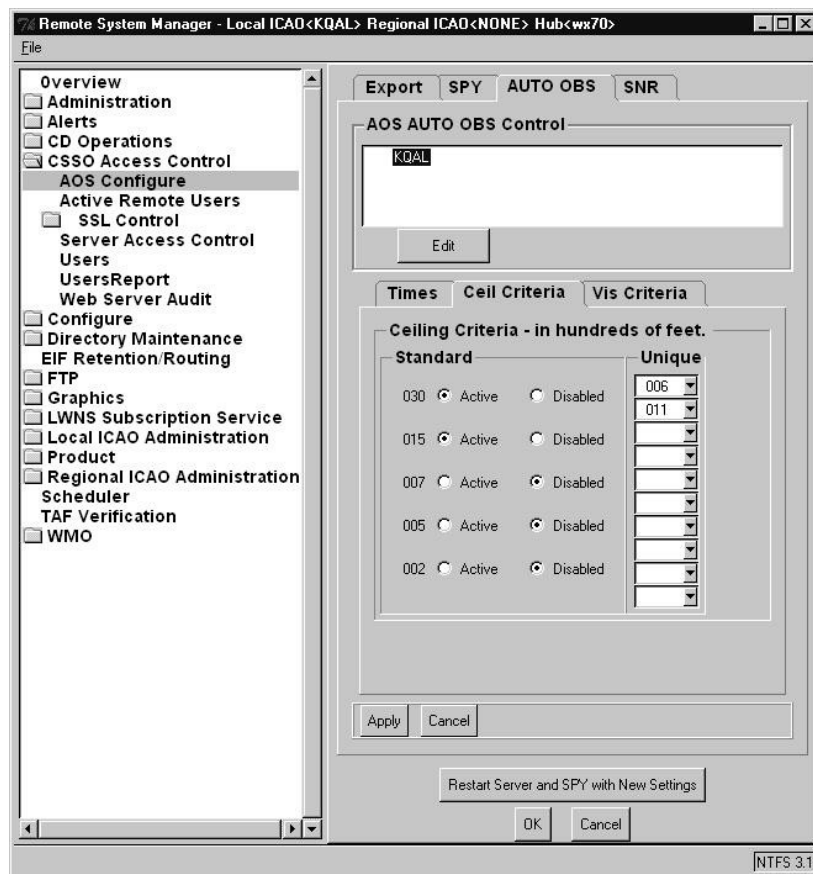
UNIT 5: CSSO

AOS Configure->AUTO OBS->Ceil Criteria

TRAINING COURSE

UNIT 5: CSSO

- **CSSO.**

  - CSSO Access Control->AOS Configure.

    - **Vis Criteria** Tab Controls the the SPECI Tests Perform for Visibility.

      - Select Active or Disabled for the Standard Set of Visibility Criteria.

      - Select Unique Visibility Criteria from Pulldown List.

      - Select "Apply" to Add Information to Address List.

      - Select "OK" to Save to Server.
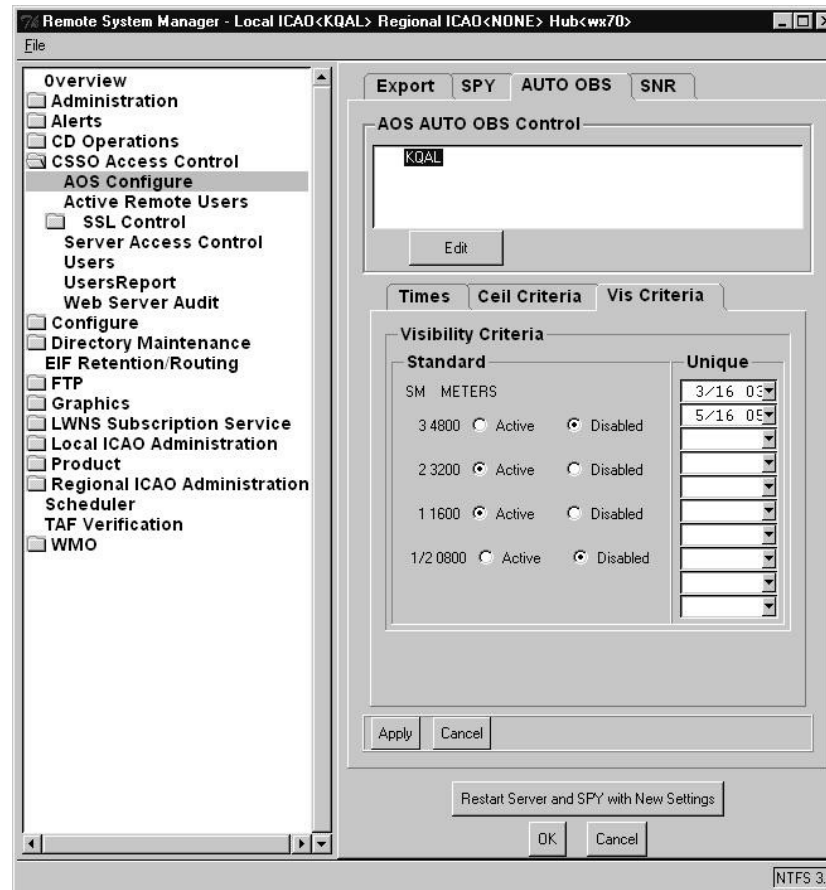
UNIT 5: CSSO

AOS Configure->AUTO OBS->Vis Criteria

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->AOS Configure.
    - **SNR** Tab Defines Location of SNR/DCU Computer.
      - Enter the SNR IP Address in "Sensor Collector IP Address" Fields.
        - Highlight Entry and Select "Edit" to Modify SNR IP Address.
        - Highlight Entry and Select "Delete" to Remove SNR IP Address.
      - Select "Apply" to Add Information to Address List.
      - Select "OK" to Save to Server.

TRAINING COURSE
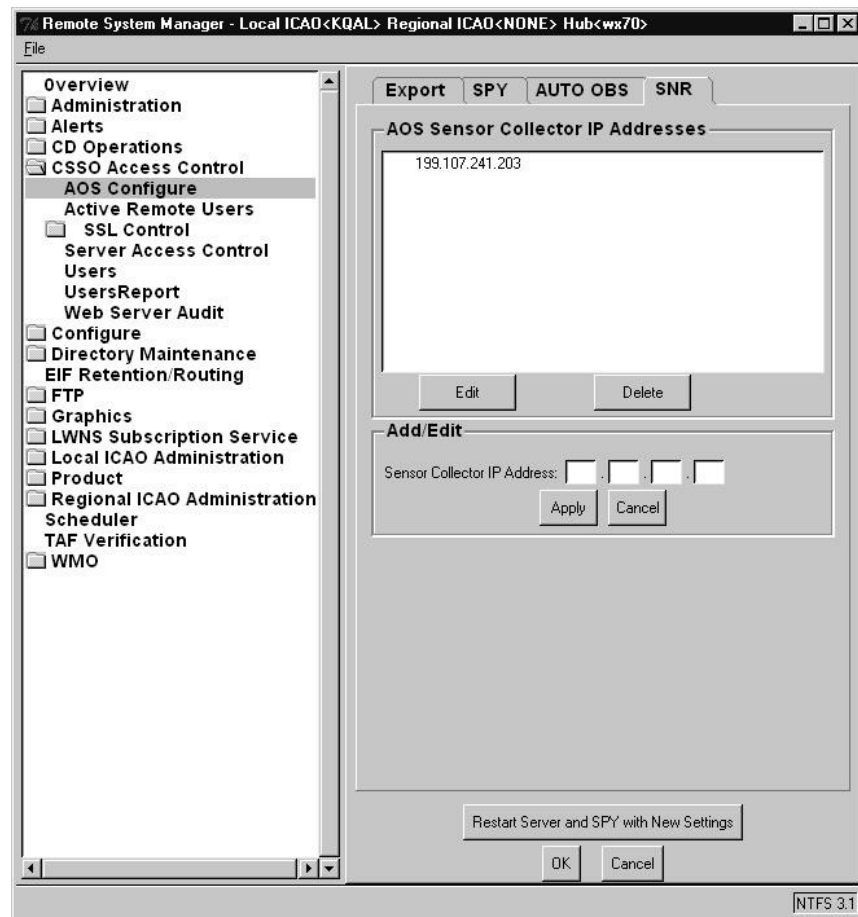
UNIT 5: CSSO

AOS Configure->SNR

UNIT 5: CSSO

- **CSSO.**
  - Secure Socket Layer (SSL) and Secure HTTP (S-HTTP).
    - SSL Uses a Technique Called Public Key Encryption That Uses a Pair of Asymmetric Keys for Encryption and Decryption.
    - Each Pair of Keys Consists of a Public Key (Obtained From a Certificate Created by an Outside Agency) and a Private Key (Created Locally).
    - The Public Key is Made Public by Distributing it Widely. The Private Key is Never Distributed; it is Always Kept Secret.
    - Data That is Encrypted With the Public Key Can Only be Decrypted With the Private Key, and Vice Versa.

UNIT 5: CSSO

- **CSSO.**

  - Secure Socket Layer (SSL) and Secure HTTP (S-HTTP).

    - The Secure Version of HTTP Uses URLs That Begin With "https" Rather Than "http", and a Different Server Port (by Default, Port 443).

    - SSL is Designed to Establish a Secure Connection Between Two Computers, While S-HTTP is Designed to Send Information Securely.

UNIT 5: CSSO

- **CSSO.**

  – Secure Socket Layer (SSL) and Secure HTTP (S-HTTP).

    - NTFS Clients Don't Support Client-Server Authentication Using SSL.

      – NTFS Uses SSL for Encryption Purposes Only.

    - Using a Browser Will Require the User to Accept the Server Certificate Before Any Data Transfers are Allowed.

      – Identical to JAAWIN Logins.

UNIT 5: CSSO

- **CSSO.**

  - Obtaining an SSL Public-Key Server Certificate.
    - Create a Server Private Key and Certificate Signing Request (CSR).
    - Export CSR to Floppy Disk From NTFS Server.
    - Request a Server Certificate From the DoD Public-Key Infrastructure (PKI) Web Site.
    - Import PKI Certificate into NTFS Server From Floppy Disk.

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->SSL Control.
    - Certificate Control.
    - Export CSR.
    - Import Certificate.

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->SSL Control.
    - Certificate Control.
      - Enter Required Information as Stated in the Field Prompts.
        - Country Name - 2-Letter Code (e.g., US).
        - State Name - Full Name (e.g., Nebraska).
        - City - Full Name (e.g., Bellevue).
        - Organization - Full Name (e.g., United States Air Force).
        - Organizational Unit - Full Name (e.g., Air Force Weather Agency).

TRAINING COURSE
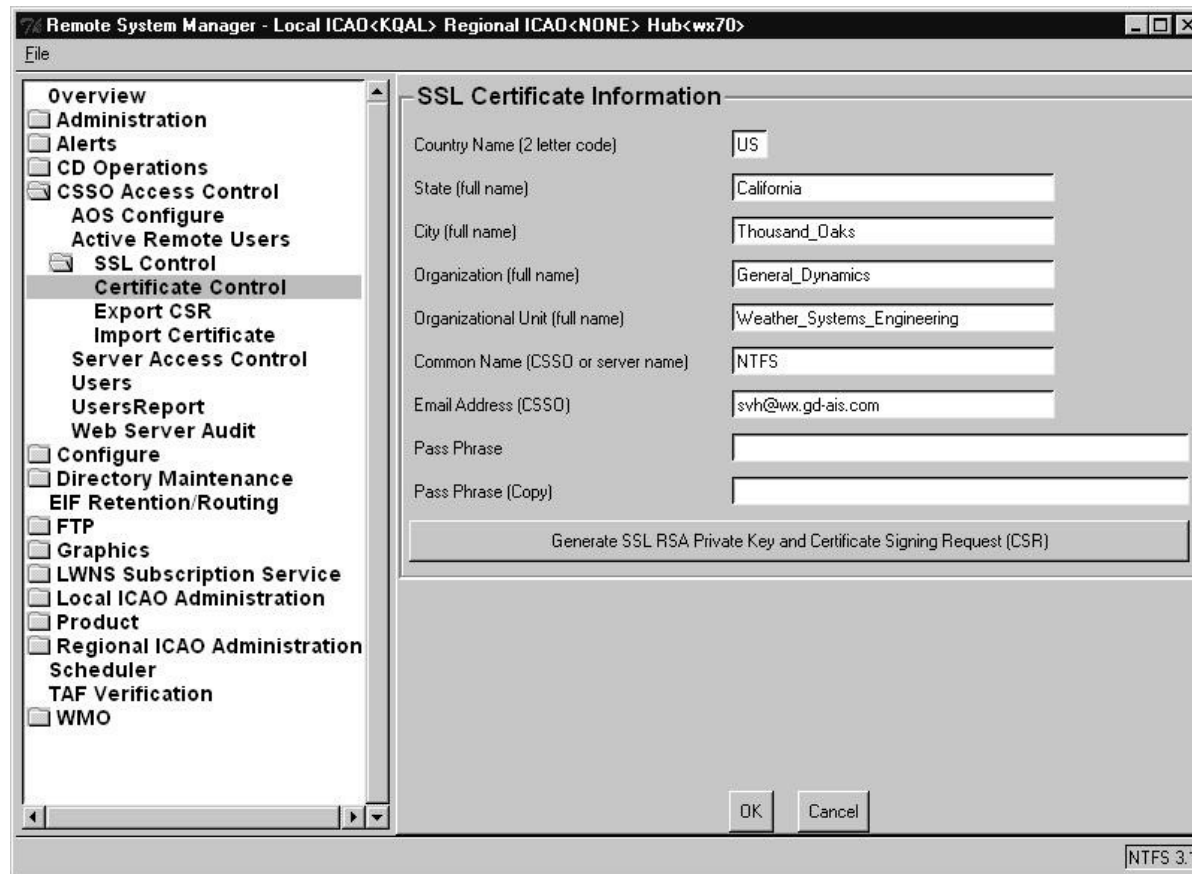
UNIT 5: CSSO

Certificate Control

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->SSL Control.
    - Certificate Control.
      - Enter Required Information as Stated in the Field Prompts.
        - Common Name - CSSO or Server Name (e.g., NTFS). This is the Name the Certificate Will Be Listed.
        - E-Mail Address - Enter E-Mail Address to Notify When the Certificate is Completed.
        - Pass Phrase - Create Pass Phrase Using Standard NTFS Password Rules (Used to Initiate SSL on the NTFS Server).

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->SSL Control.
    - Certificate Control.
      - Select "Generate SSL RSA Private Key and Certificate Signing Request (CSR)" to Generate Required Files.
        - server.key - Private Key.
        - server.csr - CSR.
      - Must Obtain a New Certificate if Another server.key is Generated.

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->SSL Control.
    - Export CSR.
      - Insert DOS Formatted Floppy into Floppy Drive.
      - Select "Export SSL CSR".
        - server.csr Will Be Copied to the Floppy.
        - Status Will Display "Write Successful".
      - Floppy Will Eject Automatically (Manually Eject for Linux, E4500, and SS60 Servers).
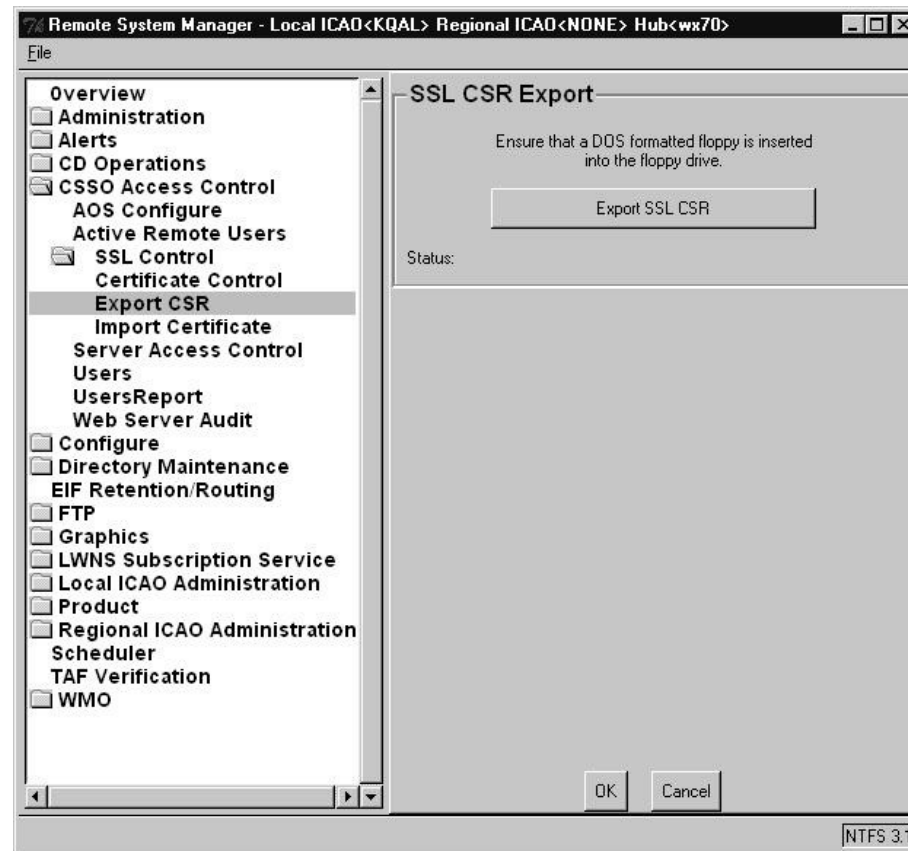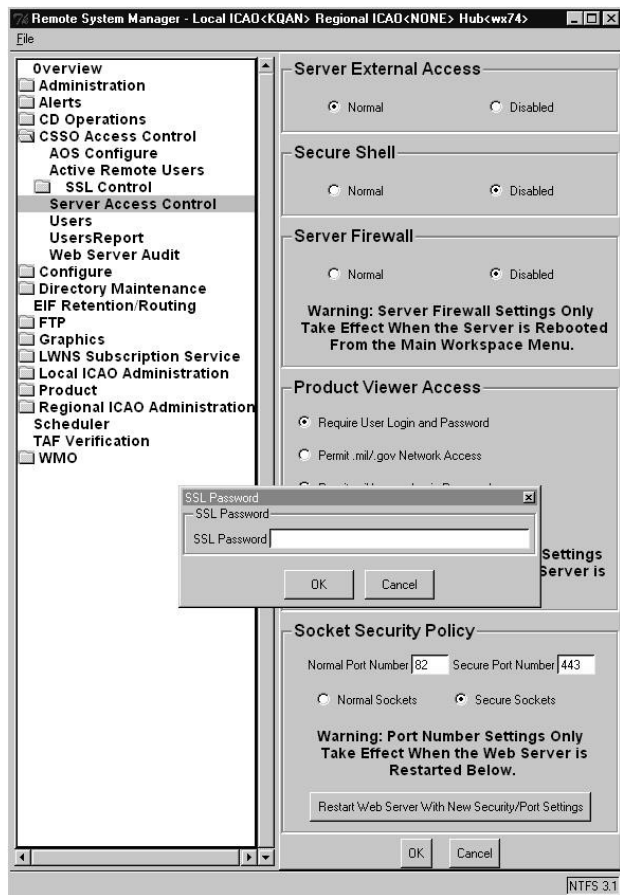
UNIT 5: CSSO

Export CSR

UNIT 5: CSSO

- **CSSO.**

  - From a Browser, Login to DoD Public Key Infrastructure (PKI) Web Site (e.g., http://dodpki.c3pki.den.disa.mil).

    - Select "Request a Server Certificate".

    - From WordPad, Display server.csr File From Floppy.

    - Copy/Paste CSR into "PKCS #10 Request" Area.

      - Only Area Bounded by BEGIN/END CERTIFICATE REQUEST, Including All Leading and Trailing Dashes.

    - Fill-in Name, E-Mail Address, and Phone Number Information.

    - Select "Submit".
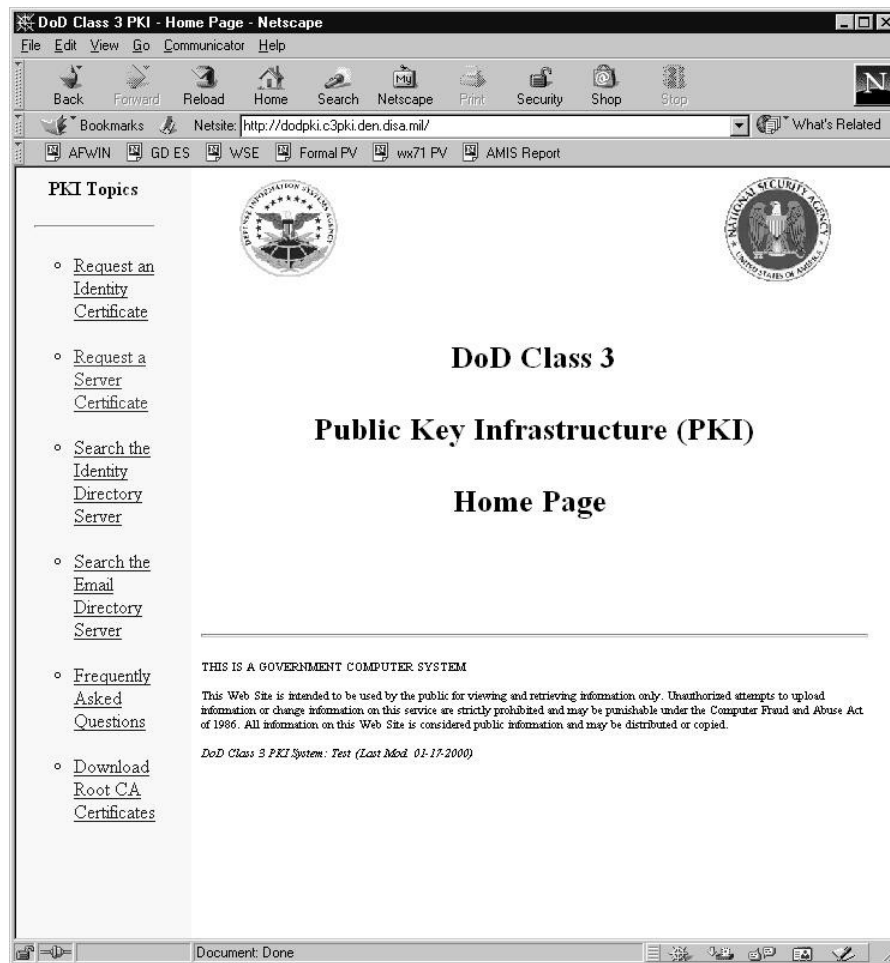
UNIT 5: CSSO

DoD PKI Web Page

TRAINING COURSE

UNIT 5: CSSO

```
Certificate Request:
    Data:
        Version: 0 (0x0)
        Subject: C=US, ST=California, L=Thousand_Oaks,
O=General_Dynamics, OU=Weather_Systems_Engineering,
CN=AMIS/Email=svh@wx.gd-es.com
        Subject Public Key Info:
            Public Key Algorithm: rsaEncryption
            RSA Public Key: (1024 bit)
                Modulus (1024 bit):
                    00:cc:f5:57:fa:81:6f:1f:86:36:d5:37:a7:a9:0f:
                    6b:44:c2:90:86:6e:5f:83:ae:9f:21:38:90:78:77:
                    9a:b4:42:95:d2:ac:ee:e3:1b:78:69:f0:1c:1f:7b:
                    e4:d1:a6:fa:2d:b7:ec:cc:a9:62:7a:1d:dc:45:96:
                    62:4b:94:04:f9:70:d9:ba:91:37:9d:54:b1:78:ee:
                    c3:3d:f2:90:d5:3e:28:a3:97:f5:b5:01:12:08:3b:
                    32:df:c8:6f:6c:5a:6f:58:32:60:81:af:b0:17:2d:
                    30:46:c3:0e:40:0c:26:03:20:94:13:8d:e9:8d:8f:
                    23:f5:d0:91:21:23:44:db:1f
                Exponent: 65537 (0x10001)
        Attributes:
            a0:00
    Signature Algorithm: md5WithRSAEncryption
        62:67:a9:db:8f:3e:3b:56:87:2e:86:4d:36:26:ff:47:90:06:
        48:a7:85:d3:6d:a0:d4:16:09:9c:29:42:00:39:7b:57:47:0b:
        1e:50:b0:26:0c:3b:50:b0:9e:d0:44:4c:bc:fa:df:d7:b5:fe:
        27:c7:6e:ca:d7:96:cf:61:a6:42:b1:a1:a9:5c:b0:dd:ee:f8:
        6c:64:a2:c3:cb:19:e9:70:e3:5e:ce:7a:32:02:3c:ff:24:62:
        df:32:e3:0c:02:e4:56:f6:af:d3:66:3d:46:4f:9f:b6:c6:c1:
        a0:56:d7:c5:6e:1c:98:27:88:b8:83:d6:d1:51:93:7a:b8:5a:
        a3:43
-----BEGIN CERTIFICATE REQUEST-----
MIIB7DCCAVUCAQAwgasxCzAJBgNVBAYTAlVTMRMwEQYDVQQIEwpDYWxpZm9ybmlh
MRYwFAYDVQQHFA1UaG91c2FuZF9PYWtzMRkwFwYDVQQKFBBHZW5lcmFsX0R5bmFt
aWNzMSQwIgYDVQQLFBtXZWF0aGVyX1N5c3RlbXNfRW5naW5lZXJpbmcxDTALBgNV
BAMTBEFNSVMxHzAdBgkqhkiG9w0BCQEWEHN2aEB3eC5nZC1lcy5jb20wgZ8wDQYJ
KoZIhvcNAQEBBQADgY0AMIGJAoGBAMz1V/qBbx+GNtU3p6kPa0TCkIZuX4OunyE4
kHh3mrRC1dKs7uMbeGnwHB975NGm+i237MypYnod3EWWYkuUBP1w2bqRN51UsXju
wz3ykNU+KKOX9bUBEgg7Mt/Ib2xab1gyYIGvsBctMEbDDkAMJgMg1BON6Y2PI/XQ
kSEjRNsfAgMBAAGgADANBgkqhkiG9w0BAQQFAAOBgQBiZ6nbjz47Vocuhk02Jv9H
kAZIp4XTbaDUFgmcKUIAOXtXRwseULAmDDtQsJ7QREy8+t/Xtf4nx27K15bPYaZC
saGpXLDd7vhsZKLDyxnpcONeznoyAjz/JGLfMuMMAuRW9q/TZj1GT5+2xsGgVtfF
bhyYJ4i4g9bRUZN6uFqjQw==
-----END CERTIFICATE REQUEST-----
```

Copy {

CSR (server.csr)

TRAINING COURSE

UNIT 5: CSSO

Paste CSR

Complete

DoD PKI Web Page

UNIT 5: CSSO

- **CSSO.**
  - From Returned E-Mail, Follow Links to Display Certificate using Serial Number and Common Name to Identify.
    - Select "Details" to View Certificate.
  - Copy/Paste Certificate into WordPad.
    - Only Area Bounded by BEGIN/END CERTIFICATE, Including All Leading and Trailing Dashes.
  - Save to DOS Formatted Floppy as a .txt File Named "server.crt".

TRAINING COURSE

UNIT 5: CSSO

Common Name (CN)

Details Selection
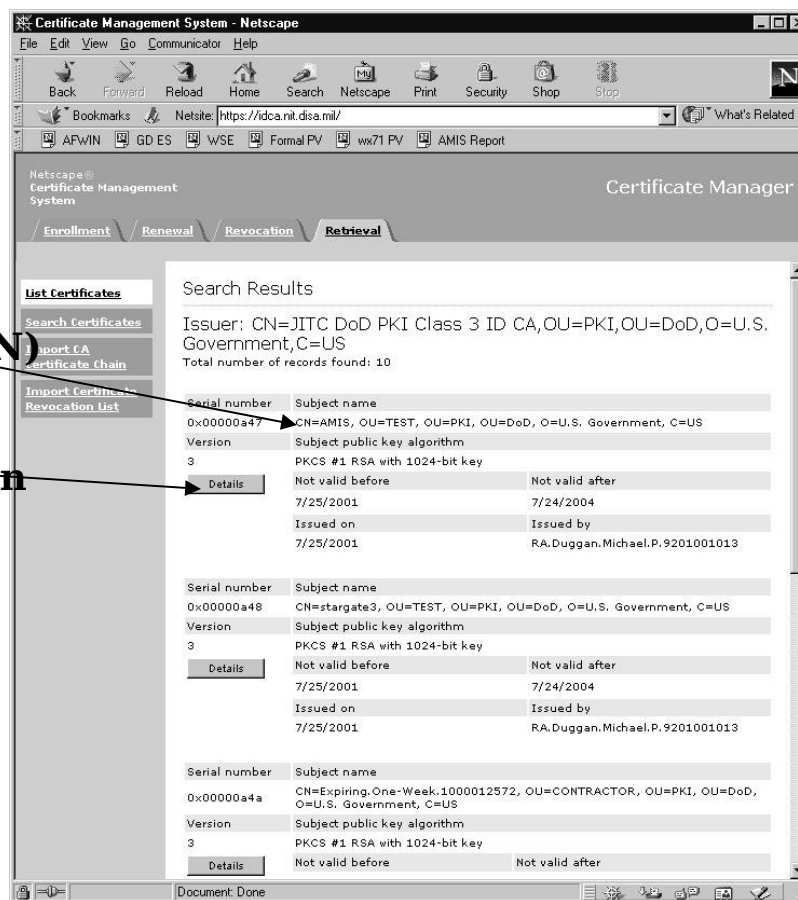
Returned E-Mail Link

TRAINING COURSE

UNIT 5: CSSO

Copy

Certificate (server.crt)

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->SSL Control.
    - Import Certificate.
      - Insert Floppy Containing server.crt File into Floppy Drive.
      - Select "Import SSL Certificate".
        - server.crt Will Be Copied to the Server.
        - Status Will Display "Read Successful".
      - Floppy Will Eject Automatically (Manually Eject for Linux, E4500, and SS60 Servers).

UNIT 5: CSSO
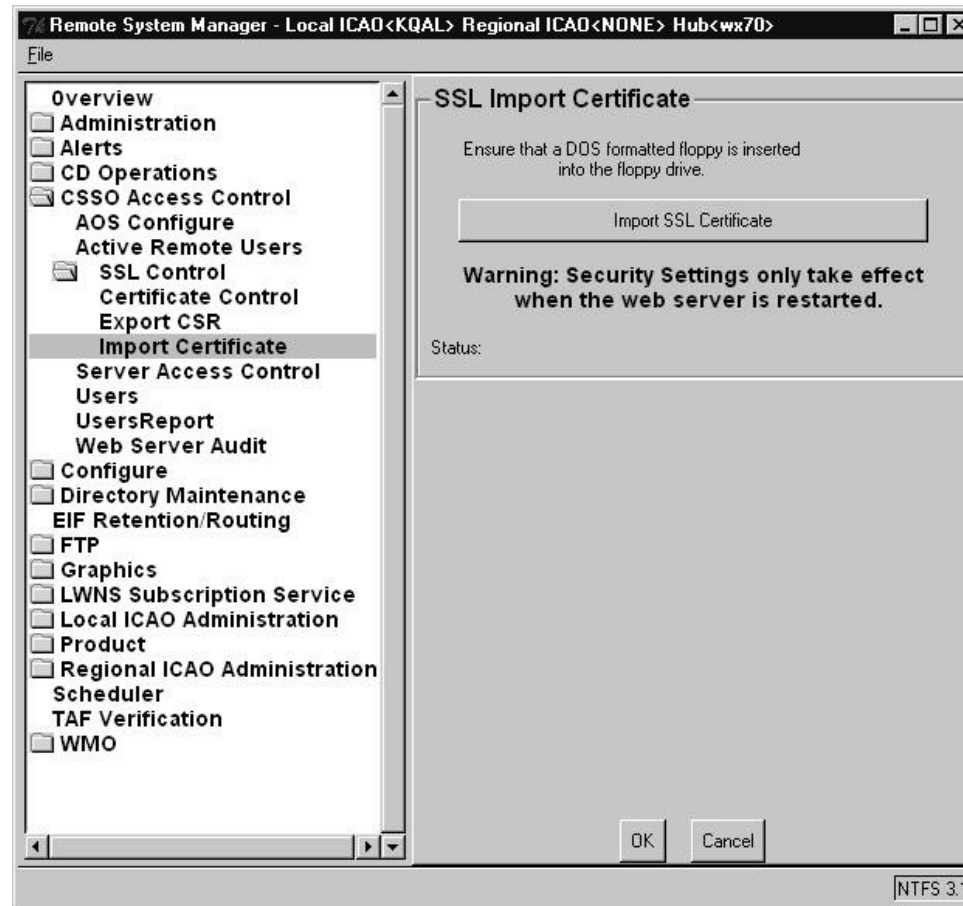
Import Certificate

TRAINING COURSE
UNIT 5: CSSO

- **CSSO.**
  - Configuring the Server to Use SSL.
    - **CSSO Access Control->Server Access Control**.
      - Select "Secure Sockets" and Enter "Port Number".
        - Use Default Port 443 Unless Directed Otherwise.
      - Select "Restart server with new Security/Port settings".
        - SSL Password Panel is Displayed.
      - Enter the Same Password as Used to Create the CSR (Pass Phrase), and Select "OK"… SSL is Now Enabled.
    - These Steps Must Be Accomplished Each Time the Web Server is Restarted, or if the NTFS Server is Rebooted.
      - The Web Server May Be Listening on the SSL Port, But Will Not Accept Any Connections Unless the Correct Password is Entered.

TRAINING COURSE

UNIT 5: CSSO

Server Access Control

TRAINING COURSE

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->Server Access Control.
    - Added SSH Disabled/Normal Selections.
      - Must Be Allowed by Local BNCC.
        - Encryption Concerns.
      - SSH is Only Required to be Enabled When Remote Maintenance is Being Accomplished via NIPRNET.
        - Allows for Possible Removal of Netblazer Router/Modem.
      - Only Need to Select "OK" to Enable if Selected.

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->Server Access Control.
    - Added Server Firewall Disabled/Normal Selections.
      - COTS Installed IP Filtering Software (Firewall).
      - Provides Protection From Unauthorized Accesses on Base LAN Port(s).
      - Disable/Enable Using Discretion of CSSO.
        - Must Shutdown and Reboot Server Before Firewall Settings are Activated.

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->Server Access Control.
    - Added "Permit .mil/.gov or Login Password" Access.
      - If a User is Coming From a .mil/.gov Address, No Username/Password is Required, Otherwise a Username/Password is Required.
    - ".mil" Access Rules Changed From ".af.mil" to Just ".mil".
      - "Permit .mil/.gov Network Access".
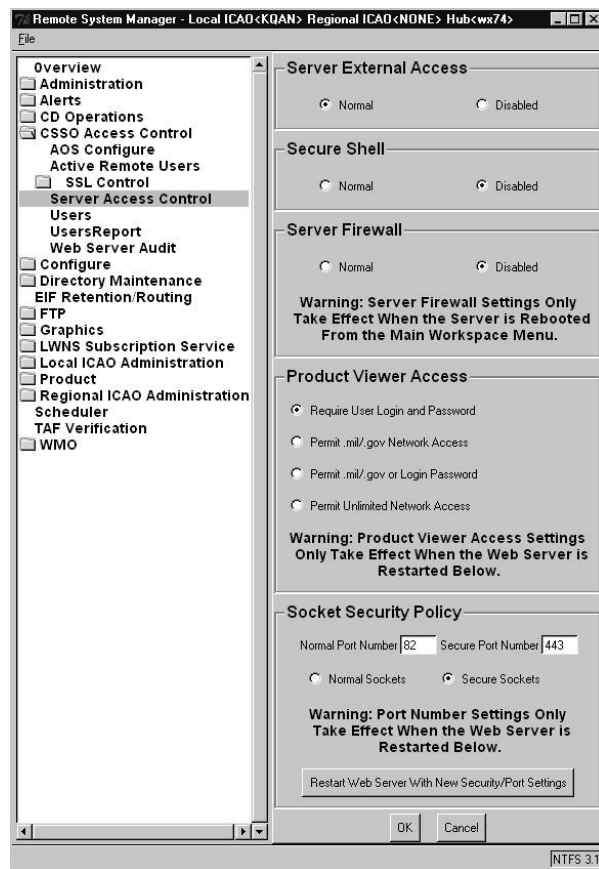
UNIT 5: CSSO

Server Access Control

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->Users.
    - New MMI for Information ("Tabs" Format).
    - Added "Unlock" Button To Unlock "Locked-out" Users (Upon Exceeding Retry Limit).

TRAINING COURSE
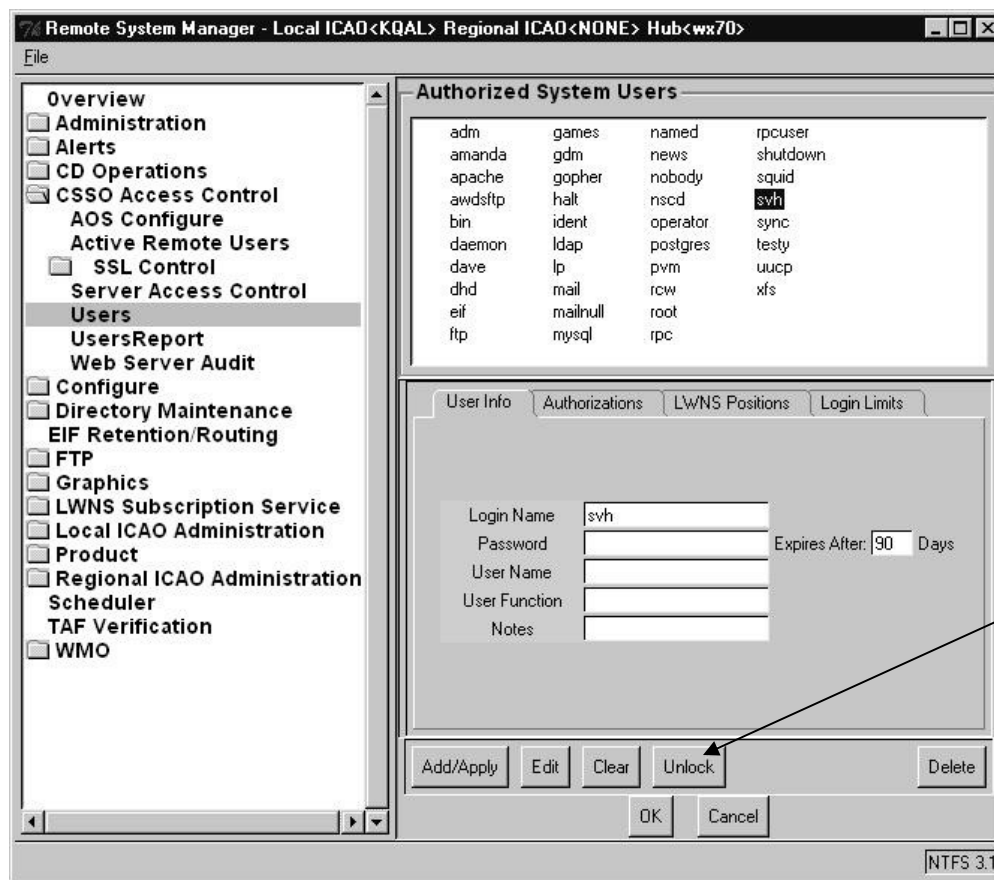
UNIT 5: CSSO

CSSO Access Control->Users

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->Users.
    - Added "LWNS Access" Under Authorizations Tab.
      - Only Needed for Users Needing LWNS/LOC Access.

TRAINING COURSE
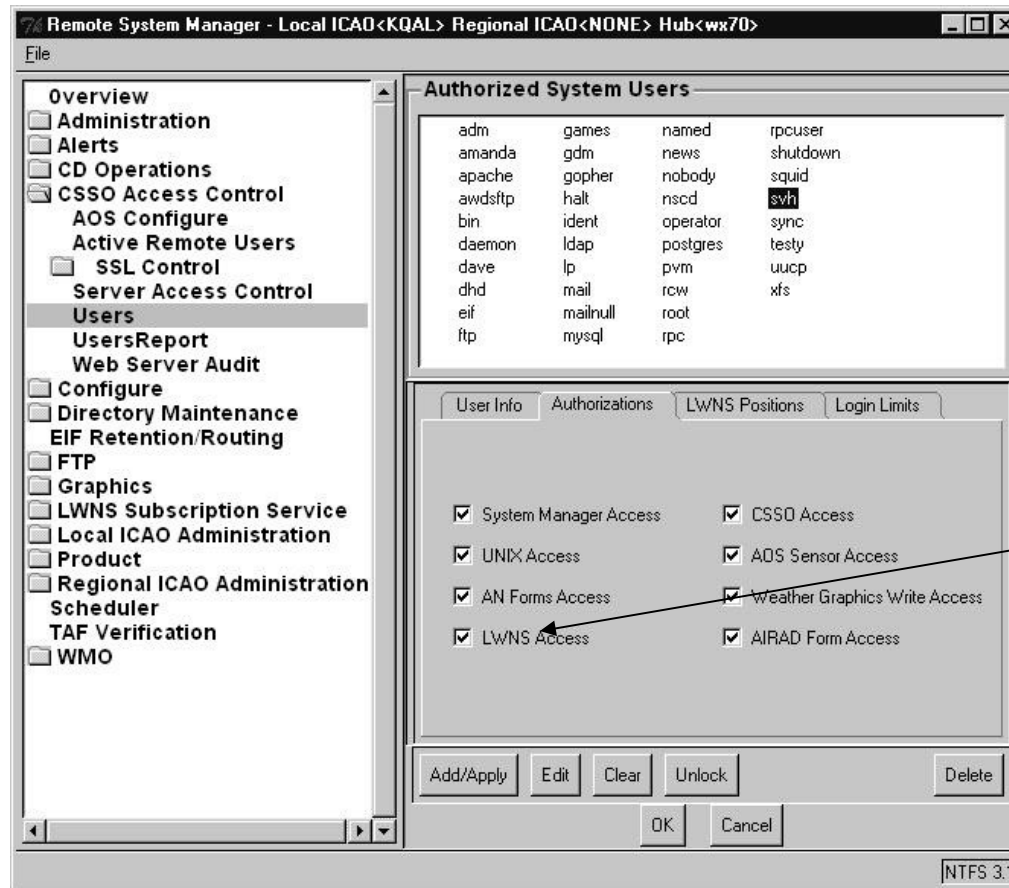
UNIT 5: CSSO

LWNS Access

Users->Authorizations

UNIT 5: CSSO

- **CSSO.**

  - CSSO Access Control->Users.

    - Added "LWNS Positions" Tab.

      - Will be "Grayed-Out" Unless User Has "LWNS Access".

      - Lists LWNS/LOC Positions (SOF, OPS, and CMD) Defined in **LWNS Subscription Service->Active Positions**.

        - Select All LWNS/LOC Positions User is Authorized to Login.

        - Users Given "LWNS Access" Will, by Default, Always be Granted Access Using the "NON" Position (no Alerts are Displayed, and no WW/WA Acknowledgements Allowed).

TRAINING COURSE
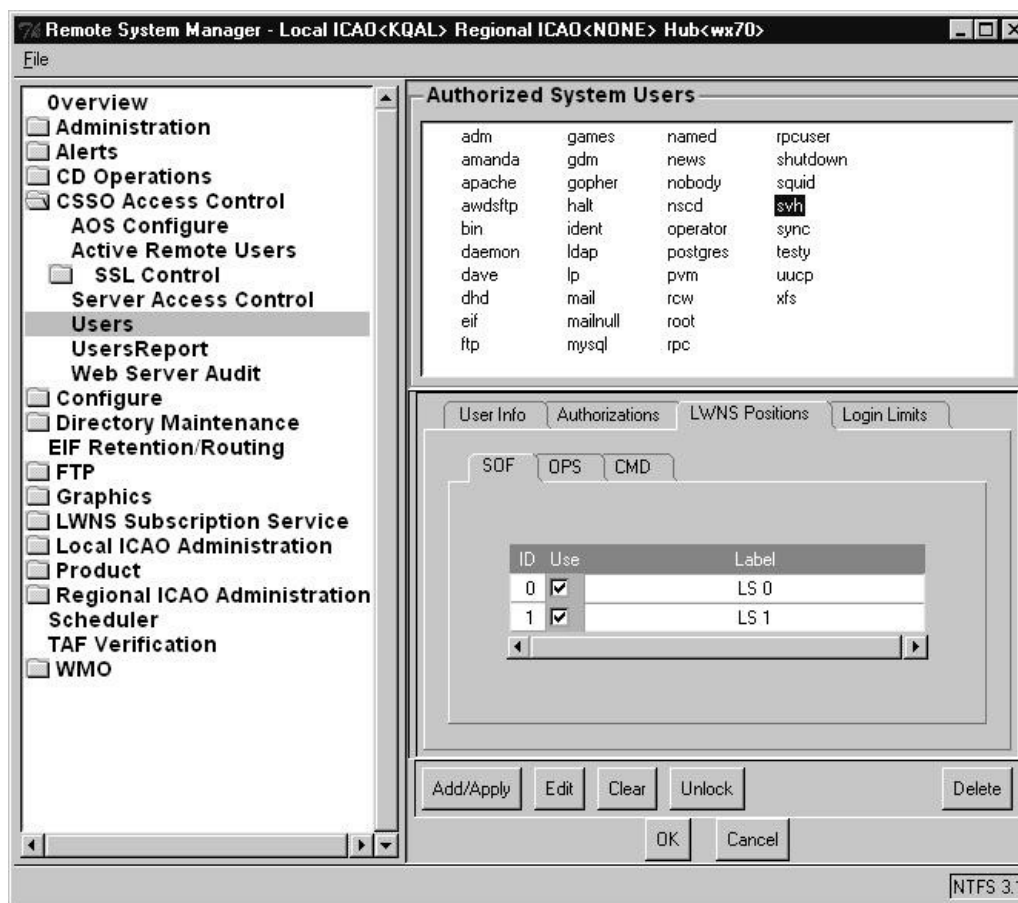
UNIT 5: CSSO

Users->LWNS Positions

UNIT 5: CSSO

- **CSSO.**
  - CSSO Access Control->Users Report.
    - Allows CSSO's to Display, Save to Floppy, or Print Defined User Information.
      - Saving to Floppy Will Save File as an Excel Importable Format.
        - Saved as "users.txt".

TRAINING COURSE

UNIT 5: CSSO

Users Report

TRAINING COURSE

UNIT 5: CSSO

Users Report

TRAINING COURSE

UNIT 6: A/N

TRAINING COURSE
UNIT 6: A/N

- **Weather A/N View.**
  - Added Ability to View CWT LWDS from OWS Without Logging into CWT.
    - Select Local Weather Data Set.
    - List of ICAOs in Upper-Left Displays All Configured Regional and Local ICAOs.
      - Configured in Local and Regional ICAO Administration.
      - Regional ICAO Network Settings Configured in Site Data Information->Network.
    - Select Desired ICAO to View LWDS.

UNIT 6: A/N

- **Weather A/N View.**
  - Added "Merged Obs Report" Selection.
    - Replicates LWNS/ATC and FCF/ATC Merged Observation Function.
    - METAR Clears Display and Starts the Merge Over Again.
    - SPECI's, LOCAL's, and AWO's Merge With Baseline METAR, With All Differences Highlighted Between Each Subsequent Observation.
      - Use "*" in the Observation Form to Remove an Element.

UNIT 6: A/N

- **Weather A/N View.**

Local Weather Data Set
View-by-Criteria
24 Hour Obs List
RAREP List
Solar/Lunar Data
ACK Report
Merged Obs Report

UNIT 6: A/N

Merged Obs Report

UNIT 6: A/N

- **Receipt Acknowledgement Products (RAPs).**

  – Only Available for Weather Warnings, Watches, and Advisories.

  – A RAP is Automatically Generated When Users of the LWNS/LOC or LWNS/ATC Clients Acknowledge Urgent Warning, Watch, or Advisory Alerts.

    - Alert Will Continuously Sound Until Alert is Acknowledged.

    - RAP is Transmitted to the LWNS "Home" Server.

    - RAP is Transmitted to the Originating NTFS Server (if Different than "Home" Server) of Product, Along With the Current List of LWNS Positions.

UNIT 6: A/N

- **Receipt Acknowledgement Products (RAPs).**
  - OWS's Will Need to Configure an "awds" Type Destinations for All CWT's for Receipt of LWNS Positions and Acknowledgements.
    - **Configure->Destinations.**
  - CWT's Will Need to Configure an "awds" Type Destination to Their OWS to Transmit LWNS Positions and Acknowledgements.
    - **Configure->Destinations.**
    - **Use the OWS ICAO as the Symbolic Name.**

TRAINING COURSE
UNIT 6: A/N

- **Weather A/N View.**
  - Added "Ack Report" Selection.
    - Allows NTFS Client Users to Generate, Display and Print Warning, Watch, and/or Advisory RAP Reports.
    - Select "Query" to Query the NTFS Server for a List of Active and Canceled Products.
      - Highlight Warning, Watch, or Advisory, and Select "Make Report".
      - List is Presented Displaying All LWNS Positions, and If Position Has Acknowledged or Not.
      - Select "Refresh Report" to Update RAP Report.
      - A "C" After the Time Indicates That the Product Has Been Canceled.
        - Available Only 1 Hour After Cancellation.

UNIT 6: A/N

- **Weather A/N View.**

Local Weather Data Set
View-by-Criteria
24 Hour Obs List
RAREP List
Solar/Lunar Data
ACK Report
Merged Obs Report

TRAINING COURSE

UNIT 6: A/N

Receipt Acknowledgement Report

UNIT 6: A/N

- **Weather A/N View.**
  - Added "Ack Report" Selection.
    - Select "Print" Report to Print the Displayed Report.
    - Server Will Automatically Print RAP Report When Warning, Watch, or Advisory is Re-issued, Expired, or Canceled.
      - Will Report on Acknowledgements Prior to Re-issue, Expiration, or Cancel.

TRAINING COURSE
UNIT 6: A/N

- **Weather A/N Forms.**
  - Observation.
    - Added Capability to COR Observations in the Past (i.e., After a Subsequent METAR is Transmitted).
      - This Function Emulates the "redlined" Corrections Currently Performed on the 3803 "After-the-Fact".
      - **Modify Existing** Must Still Be Used for CORing Observations Before a Subsequent METAR is Transmitted.
    - To correct an "After-the-Fact" Observation, Select **Edit 3813**.
      - Enter the File Time of the Observation to "Edit" at the "File Time from 3813" Prompt, then Select OK.

UNIT 6: A/N

- **Weather A/N Forms.**
  - Observation.
    - To "redline" an "After-the-Fact" Obs, Select **Edit 3813**.
      - The Latest Observation From That File Time is Loaded into the Observation Form.
      - Enter the Corrected Information, and Select **Transmit**.
      - All Functions Work as in Modify Existing, Except:
        - Date Time Field is Locked.
        - Mod Group Prefilled With "COR" and Locked.
        - Upon Transmit, the Observation Won't Be Disseminated Locally or Longline.
      - To Leave "Edit 3813" Mode, Select Either Restore, Clear, Modify Existing, or Exit the Form.

TRAINING COURSE

UNIT 6: A/N

Edit 3813

Observation Form

UNIT 6: A/N

- **Weather A/N Forms.**
  - TAF.
    - Moved Wind Shear Remarks Between Sky and Icing.
      - Longline Format.
        - KQAM TAF 051919 24010KT 8000 FG SCT020 SCT050 **WS200/20080KT** 611304 531604 QNH2989INS;
      - Local Format.
        - KQAM FCST 0519-0619 23010KT 5 FG SCT020 SCT050 **WIND SHEAR 19080KT AT 200** LGT MXD ICG 130-170 MDT TURB IN CLEAR AIR 160-200 ALTIMETER29.89INS 30/PJV

UNIT 6: A/N

- **Weather A/N Forms.**
  - Weather Warning/Watch.
    - Added RAP Report Selection.
      - Select "Acknowledged" to Display RAP Report Window.
      - Allows Users to Generate, Display and Print Warning and Watch RAP Reports.
      - All Other Functions are the Same as Discussed Earlier.

TRAINING COURSE

UNIT 6: A/N

Warning/Watch Form

TRAINING COURSE

UNIT 6: A/N

Warning/Watch Acknowledgement Display

UNIT 6: A/N

- **Weather A/N Forms.**
  - Weather Advisory/Message
    - Added RAP Report Selection.
      - Select "Acknowledged" to Display RAP Report Window.
      - Allows Users to Generate, Display and Print Advisory RAP Reports.
        - Messages are Never Acknowledged.
      - All Other Functions are the Same as Discussed Earlier.

TRAINING COURSE

UNIT 6: A/N

Acknowledgement Report

Advisory/Message Form

TRAINING COURSE

UNIT 6: A/N

Advisory Acknowledgement Display

TRAINING COURSE
UNIT 6: A/N

- **Weather A/N Forms.**
  - Operations.
    - Removed Monthly Summary Selection.
      - Obsolete With Email Transmit of Form 3813 Information to AFCCC.
    - Modified Synoptic Data Form for AFCCC Email Transmit.
      - Email Addresses Configure in RSM->**Local ICAO Administration->Site Data Information->Misc** for the Default Primary ICAO.
      - Select "Synoptic Data".
        - SYNOPTIC AND SUMMARY DATA Panel Appears.
        - Defaults to Default ICAO and Today's Data.

TRAINING COURSE

UNIT 6: A/N

Synoptic Data Page Display

UNIT 6: A/N

- **Weather A/N Forms.**
  - Operations.
    - Synoptic Data Form.
      - Select "Load Day" to Enter/Display Previous Day's Information.
      - Select "Synoptic Data" to Enter Precipication, Snow Fall, and Snow Depth Information.
      - Select "Summary of the Day" to Display NTFS Derived SOD Information.
        - Users Can Override NTFS Generated Information by Entering Information in the Override Area.
      - Select "Active Runway and Equipment Changes" to Enter Runway Changes and Remarks.

TRAINING COURSE

UNIT 6: A/N

Summary of the Day Page Display

TRAINING COURSE
UNIT 6: A/N

Active Runway and Equipment Change Page Display

UNIT 6: A/N

- **Weather A/N Forms.**
  - Operations.
    - Synoptic Data Form.
      - Select "Save Active" to Save Data to the Server.
      - Select "Preview 3813" to Display the Form 3813 Preview.
        - Select "Send to AFCCC" to Email Form 3813 Data to AFCCC.
        - Select "Print" to Print a Copy of the 3813.
        - Select "Quit" to Close Preview 3813 Window.

TRAINING COURSE

UNIT 6: A/N

Send to AFCCC

Form 3818 Preview

UNIT 6: A/N

- **A/N Misc.**
  - Ability to Ingest WMO Formatted A/N Data via FTP.
    - ASCII Text Strings Terminated With "=".
      - TAF HECA 212121Z 212121 08005KT CAVOK TEMPO 0608 VRB03KT 2000 BR SCT030 FM1000 03010KT 9999 SCT030 TEMPO 0006 VRB03KT 3000 BR=
    - FTP Push or Pull Supported.
      - Select **FTP->Ingest Authorizations** to Configure Username and Password for FTP Push.
   - Select **FTP->Other Product Sources** to Configure for FTP Pull.
    - Query and View Data as With Any Other A/N Product.

UNIT 7: WEATHER GRAPHICS

UNIT 7: WEATHER GRAPHICS

- **File->Preferences.**
  - Removed "Show Grid" and "Snap to Grid" Options.
    - Not Active in NTFS 2.0.
  - Added "Grid Plot Density" Option.
    - Allows Override of Displayed Grid Data Density Without Zooming.
      - "4/1" Indicates Display 4x Grid Points if Available.
      - "1/2" Indicates Display 1/2 Grid Points.

UNIT 7: WEATHER GRAPHICS
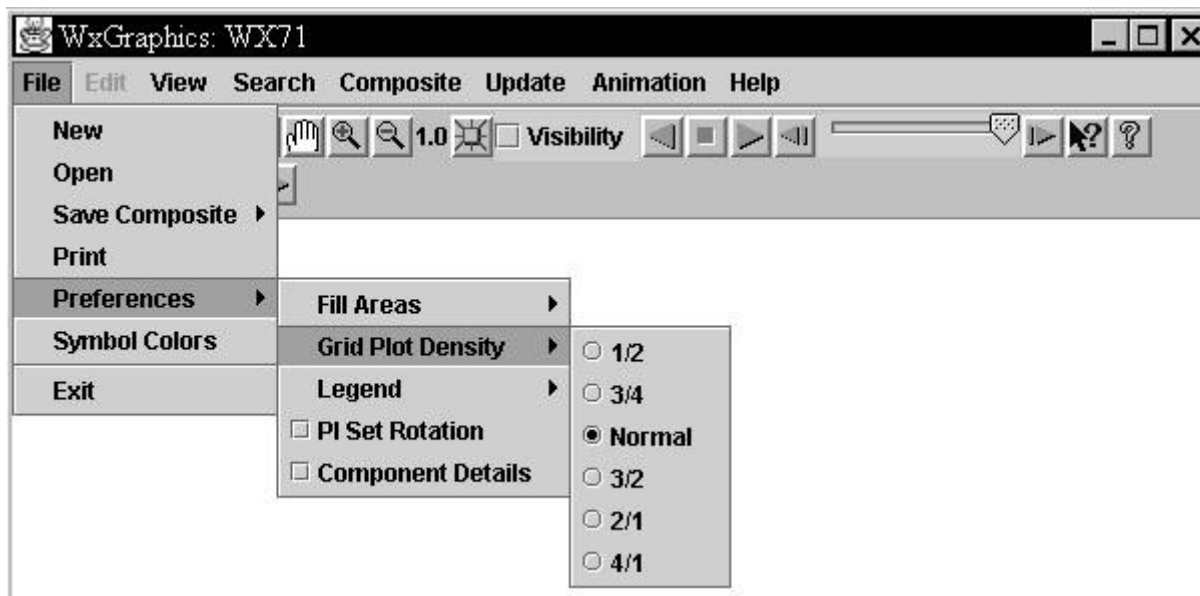

Grid Plot Density Menu

UNIT 7: WEATHER GRAPHICS

- **File->Preferences.**
  - Added "Manage Cache" Option.
    - Allows Clearing and Syncing of the Image/Background Cache.
      - Select "Clear All of Image Cache" to Remove Disk Cached Images and Backgrounds.
        - Ensure That No Images/Backgrounds are Displayed Prior to Selecting To "Continue".
      - Select "Resync Image Cache" to Sync-Up the Disk Cache and the Weather Graphics Cache.
        - Perform After a "Clear All of Image Cache".
        - Ensure That No Images/Backgrounds are Displayed Prior to Selecting To "Continue".
    - Use This Option Only When Directed by Maintenance Personnel.

TRAINING COURSE

UNIT 7: WEATHER GRAPHICS
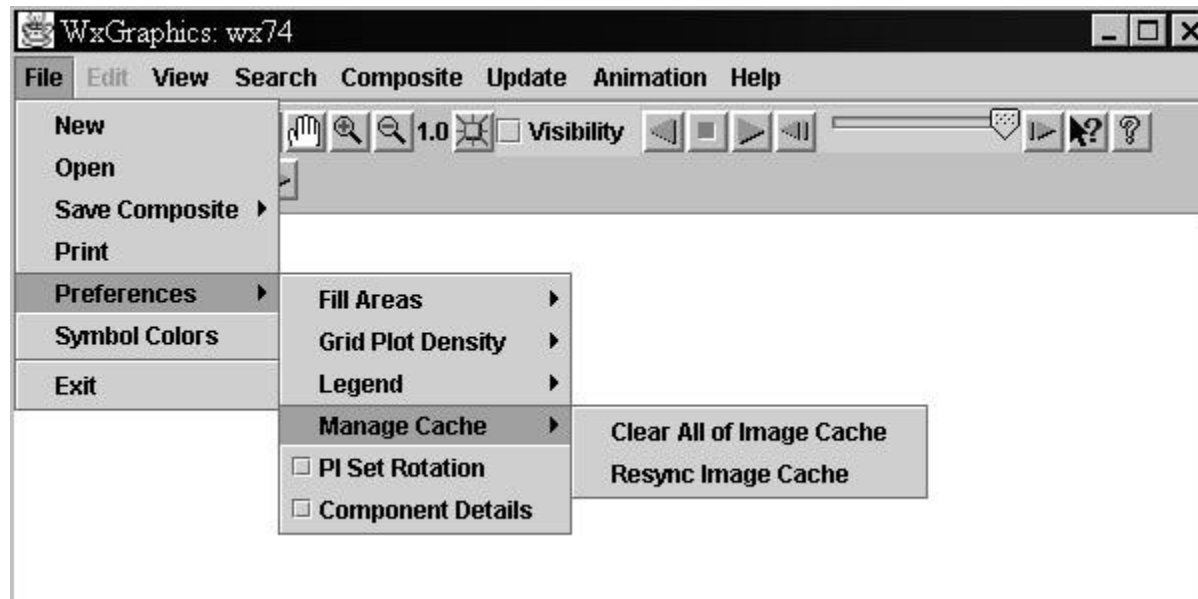
Manage Cache Menu
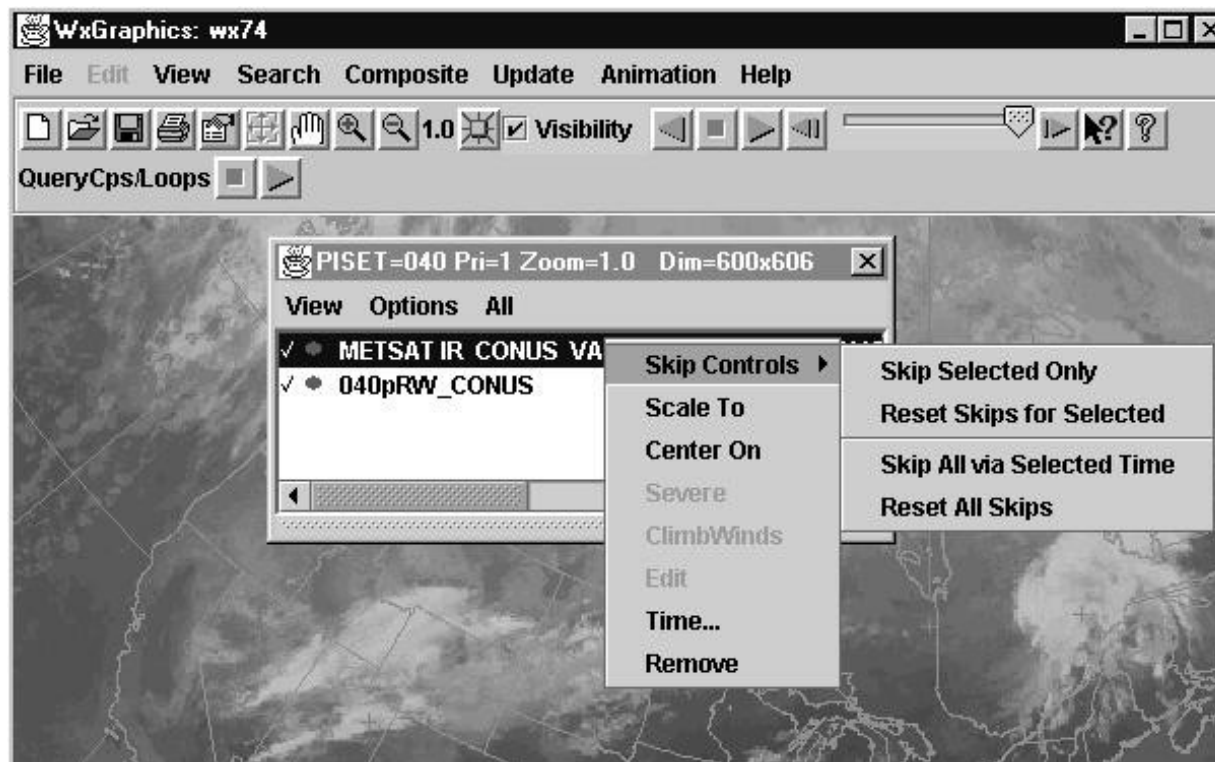
UNIT 7: WEATHER GRAPHICS

- **File->Layer List->Options.**
  - Added "Skip Controls" Option.
    - Allows Removing Product(s) From a Loop Sequence.
      - Can Also Use Right-Mouse Button Over Highlighted Product in Layer List to Select "Skip Controls".
    - Skip Settings are Not Saved in the Composite; the Skip Settings are Only Active During Display of the Loop.
    - With the Identified Product Displayed and Highlighted in Layer List, Select **Skip Controls->Skip Selected Only**.
      - May Need to Advance Loop Until Target Product is Visible.
      - Repeat For Any Other Product(s).
      - Select **Reset Skips for Selected** to Remove All Skips.

UNIT 7: WEATHER GRAPHICS

- **File->Layer List->Options.**
  - Added "Skip Controls" Option.
    - If Multiple Products Having the Same Time Are Displayed in the Same Loop "Slot" and Both Wish to Be Skipped, Select **Skip All via Selected Time**.
      - May Need to Advance Loop Until Target Products are Visible.
      - Repeat For Any Other Product(s).
      - Select **Reset All Skips** to Remove All Skips.

TRAINING COURSE

UNIT 7: WEATHER GRAPHICS

Layer List Skip Controls

TRAINING COURSE

UNIT 7: WEATHER GRAPHICS

- **View->Define Region for "Area of Interest(AOI)".**
  - Added New MMI for DTED Mapping.
    - AOI Backgrounds Sorted by Name or ID via Toggle Selection.
  - View->Define Region for Area of Interest (AOI).
    - Left Mouse Select at Center, Hold and Drag to Define Region, Release to Display AOI Dialog Panel (Same as NTFS 2.0).
    - Creates a "Background Composite" with Several Components.
      - Topographic Elevation Data.
      - Topographic Relief Data.
      - Water Ways.
      - Cities.
      - Roads.
      - Political Boundary's.

TRAINING COURSE

UNIT 7: WEATHER GRAPHICS
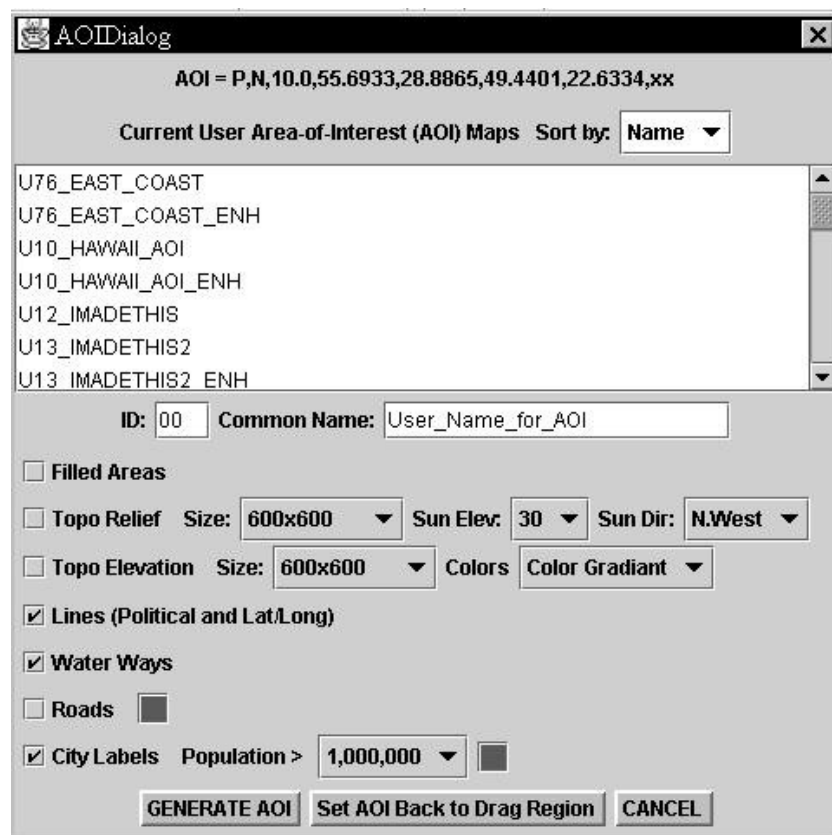
DTED Mapping Options

UNIT 7: WEATHER GRAPHICS

- **View->Define Region for "Area of Interest(AOI)".**
  - Background Creation Options.
    - Filled Areas. Produces Backgrounds With Brown Land/Blue Water.
    - Topo Relief.
      - Size. Select Resolution of Relief Background (Defaults to 600x600).
      - Sun Elevation. Select Elevation of Sun to Enhance Relief Affect (Defaults to 30 Degrees).
      - Sun Direction. Select Direction of Sun to Enhance Relief Affect (Defaults to Northwest).

TRAINING COURSE

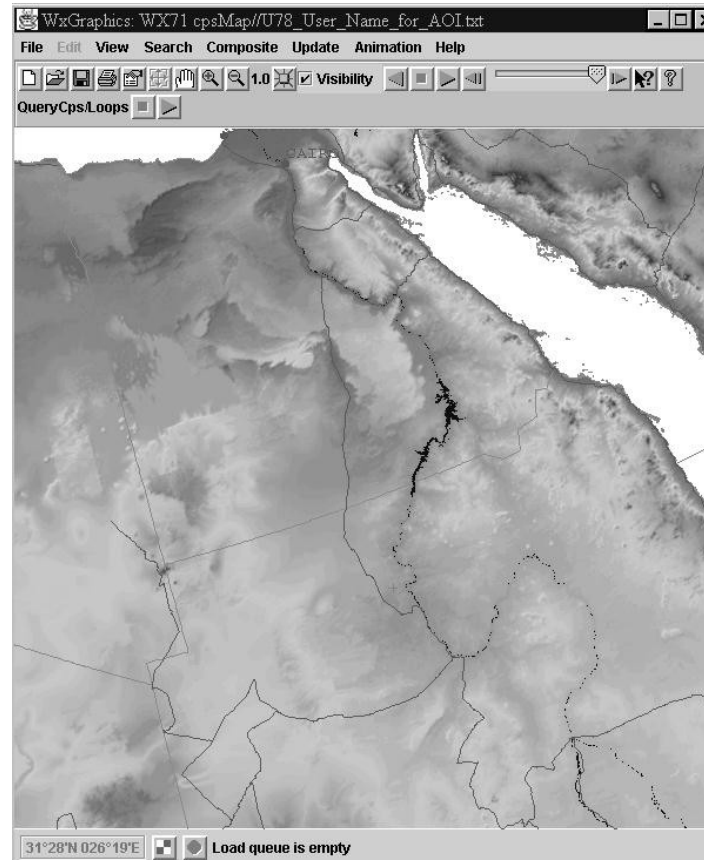# UNIT 7: WEATHER GRAPHICS

- **View->Define Region for "Area of Interest(AOI)".**
  - Background Creation Options.
    - Topo Elevation.
      - Size. Select Resolution of Topographic Background (Defaults to 600x600).
      - Colors. Select Color Curve for Defining Elevation (Defaults to Color Gradient).
    - Lines (Political and Lat/Long). Select if Political Boundary's and Lat/Long Lines Are to be Created (Selected by Default).

UNIT 7: WEATHER GRAPHICS

- **View->Define Region for "Area of Interest(AOI)".**
  - Background Creation Options.
    - Water Ways. Select if Inland Rivers and Lakes Are to be Created (Selected by Default).
    - Roads. Select if Roads Are to be Created.
      - Color. Select Color of Roads (Defaults to Cyan).
    - City Labels. Select if City Labels Are to be Created.
      - Population. Select Population Threshold Value When to Start Creating City Labels (Selected by Default and Defaults to 1,000,000).
      - Color. Select Color of City Labels (Defaults to Cyan).
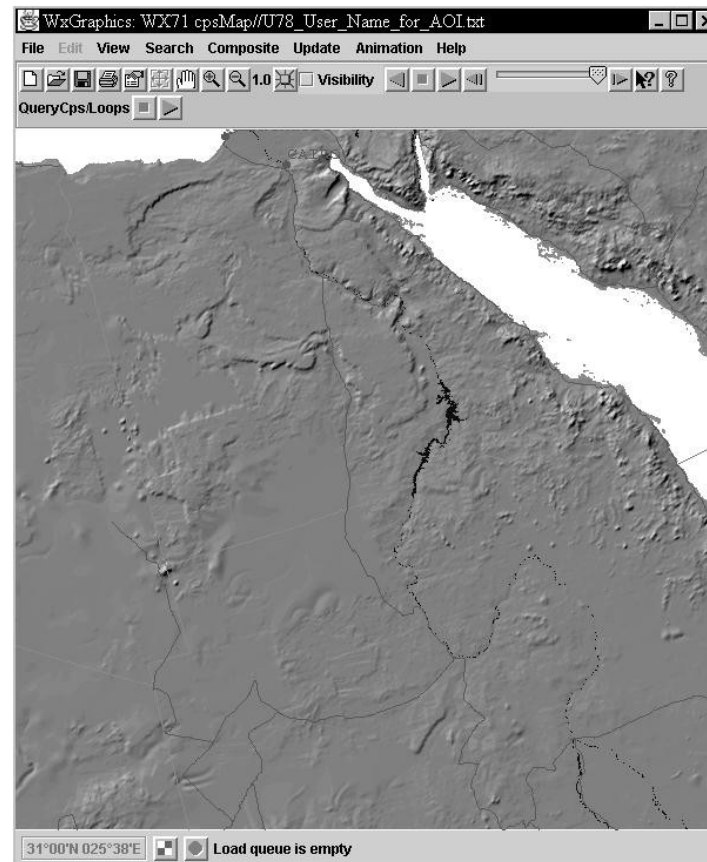 - Background Composite List Will Automatically Display When AOI Generation is Completed.

UNIT 7: WEATHER GRAPHICS

Background

TRAINING COURSE

UNIT 7: WEATHER GRAPHICS

Background Without Relief Data

UNIT 7: WEATHER GRAPHICS

- **File->Save Composite.**
  - Added "Background Composite" Option.
  - Saves Composite as a "Background".
- **Composite->Save Composite Definition.**
  - Added "Background Composite" Option.
  - Saves Composite as a "Background".

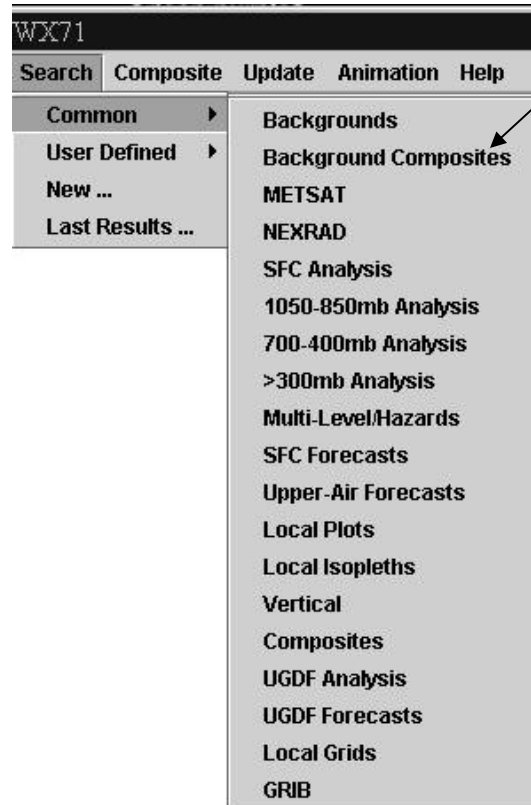TRAINING COURSE

UNIT 7: WEATHER GRAPHICS

File->Save Composite Options

Composite->Save Composite Definition Options

UNIT 7: WEATHER GRAPHICS

- **Search->Common.**
  - Added "Background Composites" Option.
    - "Backgrounds" Sorted by Name or ID via Toggle Selection.

TRAINING COURSE

UNIT 7: WEATHER GRAPHICS

Background Composites Select

WX71

| Search | Composite | Update | Animation | Help |

Common ▶
User Defined ▶
New ...
Last Results ...

Backgrounds
Background Composites
METSAT
NEXRAD
SFC Analysis
1050-850mb Analysis
700-400mb Analysis
>300mb Analysis
Multi-Level/Hazards
SFC Forecasts
Upper-Air Forecasts
Local Plots
Local Isopleths
Vertical
Composites
UGDF Analysis
UGDF Forecasts
Local Grids
GRIB

Common Background Composites Search

UNIT 7: WEATHER GRAPHICS

- **Search->New.**
  - Added Background Subtype Filters of "DTED MAP" and "BACKGROUND COMPOSITE".
    - DTED MAP Option Lists Relief and Elevation Components.
    - BACKGROUND COMPOSITE Option Lists Background Composite Definitions.
    - SECONDARY MAP Option Lists City, Lakes/Rivers, and Road Components.
  - All BACKGROUND Lists Sorted by Name or ID via Toggle Selection.

TRAINING COURSE

UNIT 7: WEATHER GRAPHICS
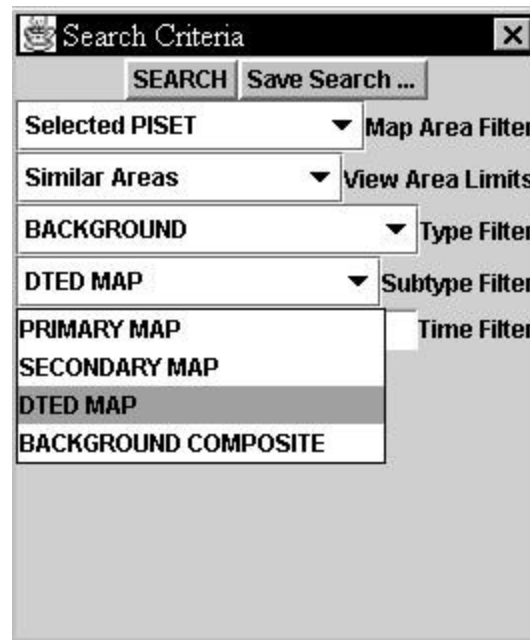
BACKGROUND Type Search Options

TRAINING COURSE
UNIT 7: WEATHER GRAPHICS

DTED Map Search List

TRAINING COURSE

UNIT 7: WEATHER GRAPHICS

Background Composite Search List

TRAINING COURSE

UNIT 7: WEATHER GRAPHICS

Secondary Map Search List

TRAINING COURSE

UNIT 7: WEATHER GRAPHICS

Primary Background Search List

UNIT 7: WEATHER GRAPHICS

- **Search->New.**
  - Added EXTERNAL GIF/JPG Location and Parameter Filters.
    - Uses LAH to Define Area and Sub-Area.
    - Similar to Product Viewer->Other Weather Products Filters.
  - Added Type Filter of "NITF" and Subtype Filter of "NITF IMAGES".
    - NITF Images Can be Treated the Same as Other Products.
      - Composites, etc.

TRAINING COURSE

UNIT 7: WEATHER GRAPHICS
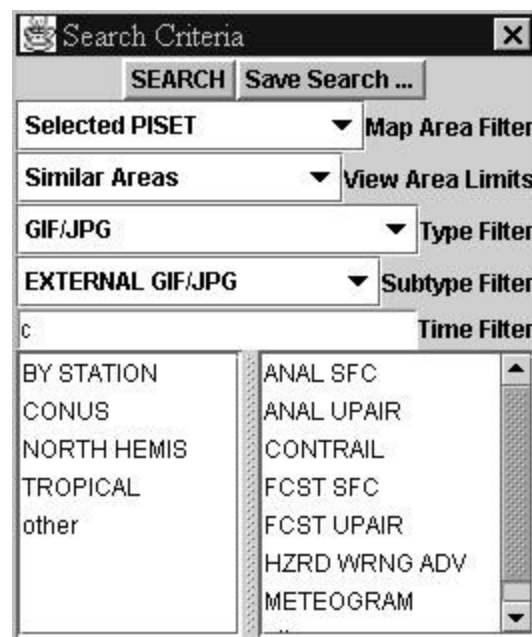
External GIF/JPG Search Options

UNIT 7: WEATHER GRAPHICS

NITF Search Option

UNIT 8: MET GENERATION

UNIT 8: MET GENERATION

- **Surface/UA FBD View/Edit Data Elevation Label Changed to "m" from "ft".**

- **Added Label to Severe and Climb Winds Panel to Indicate Whether Data is Original or Edited.**

TRAINING COURSE

UNIT 8: MET GENERATION

Surface View/Edit Panel

TRAINING COURSE

UNIT 8: MET GENERATION

Upper Air View/Edit Panel

TRAINING COURSE

UNIT 8: MET GENERATION

Data Type Indicators

Severe and Climb Wind Panel

UNIT 9: LWNS/LOC

UNIT 9: LWNS/LOC

- **Replicates Same Functionality as Legacy FCF/FO.**
  - Added Capability:
    - User Defined Alert Sounds/Colors.
    - User Defined Product Catalog (A/N and Graphic).
      - Ability to Display Other A/N Products.
      - Ability to Display Graphic Products and Loops.
    - Receipt Acknowledgement of Warnings, Watches, and Advisories.
    - LWDS-Type Display Format for Local ICAO (i.e., Split-Screen).
    - Increased Displayed Alternate ICAOs to 20.

UNIT 9: LWNS/LOC

- **Login Screen Identical to NTFS.**

- **Once Connected, and the Session Has Been Accepted by NTFS, the Position Selection Panel Appears.**

  - Select the Position, or Select "None", for Identification.

    - Only a Single Position and User is Allowed to be Active at Any Given Time.

      - Last Login Wins…Other Login Will be Terminated.

- **Once Position is Selected, the LOC Main Window is Displayed.**

  - If Web Server is Restarted, Must Re-Login.

TRAINING COURSE
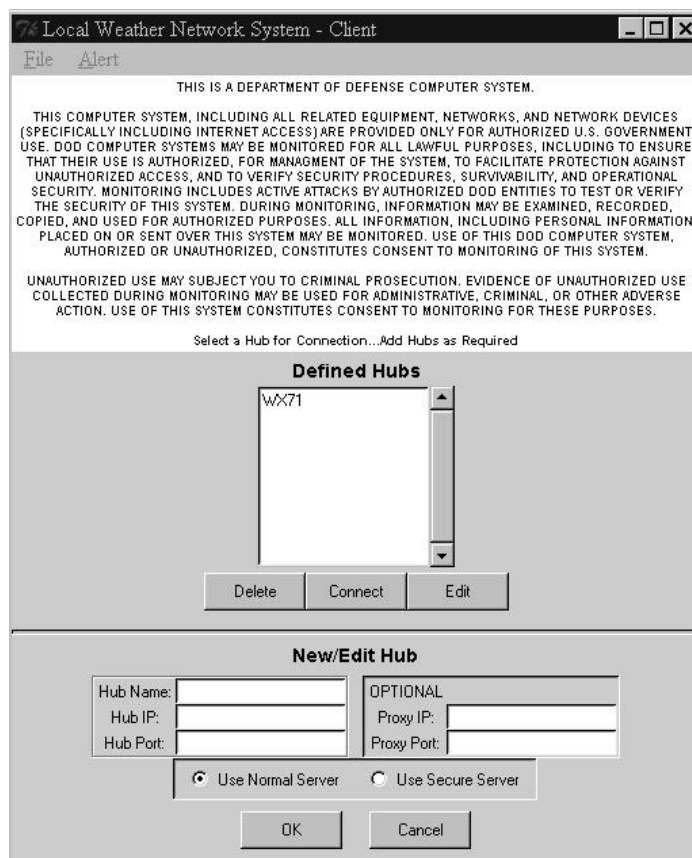
UNIT 9: LWNS/LOC

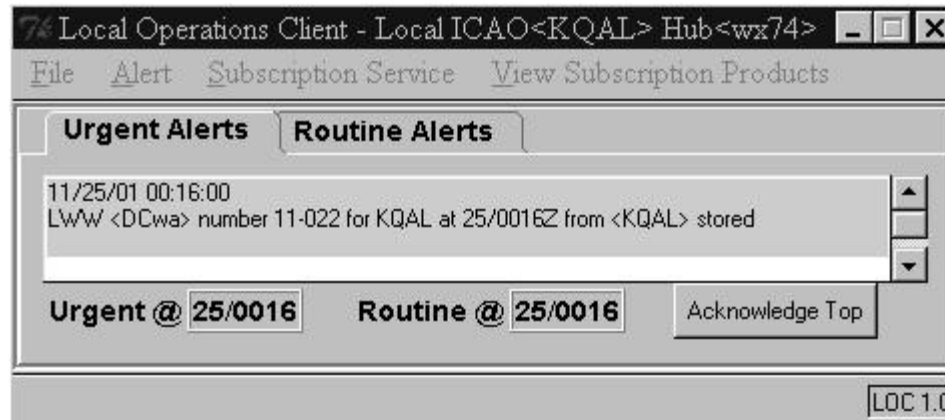

LWNS/LOC Login Screen

UNIT 9: LWNS/LOC

Position Selection Menu

TRAINING COURSE

UNIT 9: LWNS/LOC

LWNS/LOC Main Window

UNIT 9: LWNS/LOC

- **LOC Menu.**

  - Select **File->Change Password** to Change the User Password When Required.

  - Select **File->Exit** to Exit the LOC Application.

UNIT 9: LWNS/LOC

LWNS/LOC Change Password

UNIT 9: LWNS/LOC

- **LOC Menu.**

  - Select Alert->Preferences to Modify the Alert Sounds and Colors.

    - Colors. Select **Adjust** to Display Windows Color Palette.

      - Select Desired Color, and Select **OK**.

    - Sounds. Select **Adjust** to Display List of Available .wav Files.

      - Add Personal .wav Files in c:\Program Files\LWNS\sounds.

      - Highlight Desired Sound, and Select **Open**.

        - Select **Play** to Test/Listen.

      - Select **Silence** to Turn-Off Routine Alerts.

TRAINING COURSE

UNIT 9: LWNS/LOC

- **LOC Menu.**

  - Select Alert->Preferences to Modify the Alert Sounds and Colors.

    - Toggle Auto Display to Automatically De-iconify LOC Window When Routine Alert Arrives.

      - LOC Will Always Automatically De-Iconify When Urgent Alert is Retrieved.

    - Select **Save** to Save Preferences to Server for Each Username.
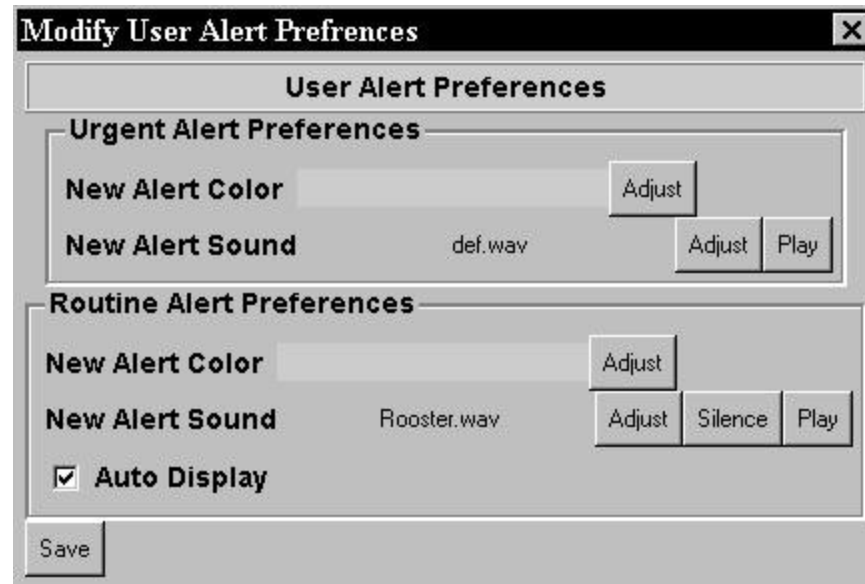
UNIT 9: LWNS/LOC

LWNS/LOC Alert Preferences

TRAINING COURSE

UNIT 9: LWNS/LOC

- **Alert Options Panel.**
  - Alerts Will Only Display Since Login.
    - No Historical Alerts Are Retrieved.
  - Place Cursor in Alert Window, Select Right Mouse Button, Alert Options Panel is Display.
    - To Delete Alerts, Select **Mark/Mark All** to Select Alert(s), Then Select **Acknowledge Top** to Remove Alert(s).
    - Select **UnMark** to Remove Delete Mark.

TRAINING COURSE

UNIT 9: LWNS/LOC

Cut

Print

View

Mark

Mark All

UnMark

LWNS/LOC Alert Options
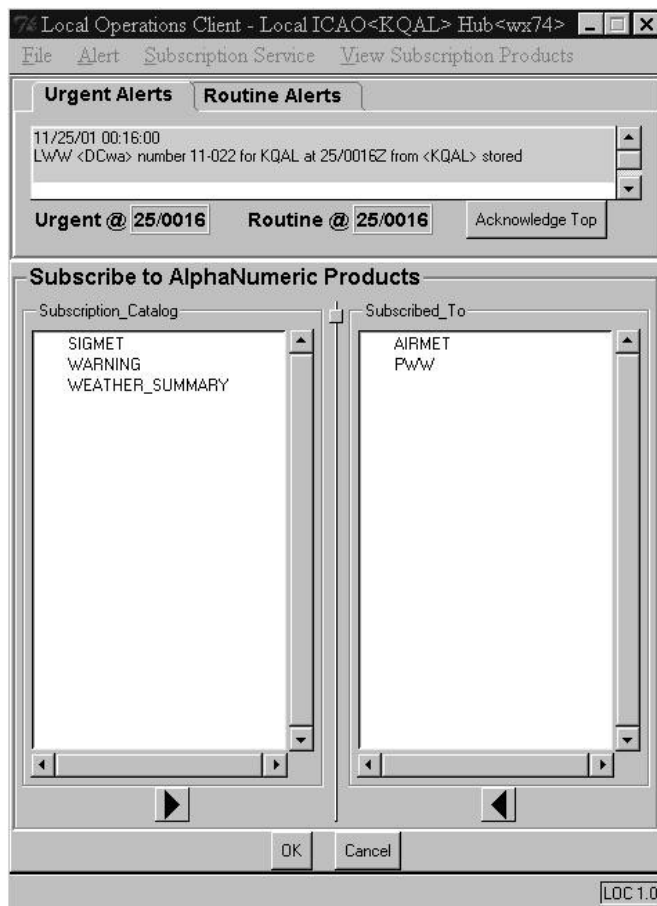
UNIT 9: LWNS/LOC

- **Alert Options Panel.**
  - For Urgent Alerts (i.e., Warnings, Watches, and Advisories), Alert Option Panel is Not Needed.
    - Alert Will Sound Continuously Until Acknowledged.
    - Select **Acknowledge Top** to Remove Urgent Alert and Silence Alert.
      - Only One Urgent Alert Can be Removed at a Time.
      - Receipt Acknowledgement is Automatically Generated.
  - For Routine Alerts (i.e., FCF Dataset Arrivals), Alert Will Occur Only Once When Arrived.

TRAINING COURSE

UNIT 9: LWNS/LOC

- **Alphanumeric Subscription Service.**
  - Subscription Service->Alpha Numeric.
  - Lists Available Selections Configured by System Manager.
    - LWNS Subscription Service -> Local LOC Products.
  - To Subscribe to a A/N Product (Move Product to "Subscribed To" Column).
    - Double-Click on Product in "Subscription Catalog" Column.
    - Highlight, and Select Move-Right Arrow.
  - To Unsubscribe to a A/N Product (Move Product to "Subscription Catalog" Column).
    - Double-Click on Product in "Subscribed To" Column.
    - Highlight, and Select Move-Left Arrow.

TRAINING COURSE

UNIT 9: LWNS/LOC

A/N Subscription List

TRAINING COURSE

UNIT 9: LWNS/LOC

- **Graphic Subscription Service.**
  - Subscription Service->Graphics.
  - Lists Available Selections Configured by System Manager.
    - LWNS Subscription Service -> Local LOC Products
  - To Subscribe to a Graphic Product (Move Product to "Subscribed To" Column).
    - Double-Click on Product in "Subscription Catalog" Column.
    - Highlight, and Select Move-Right Arrow.
  - To Unsubscribe to a Graphic Product (Move Product to "Subscription Catalog" Column).
    - Double-Click on Product in "Subscribed To" Column.
    - Highlight, and Select Move-Left Arrow.
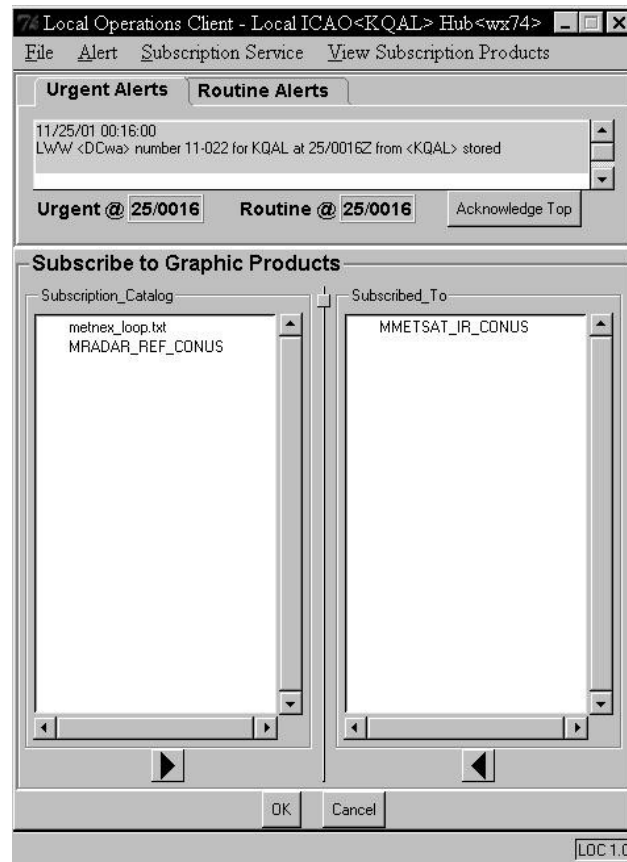
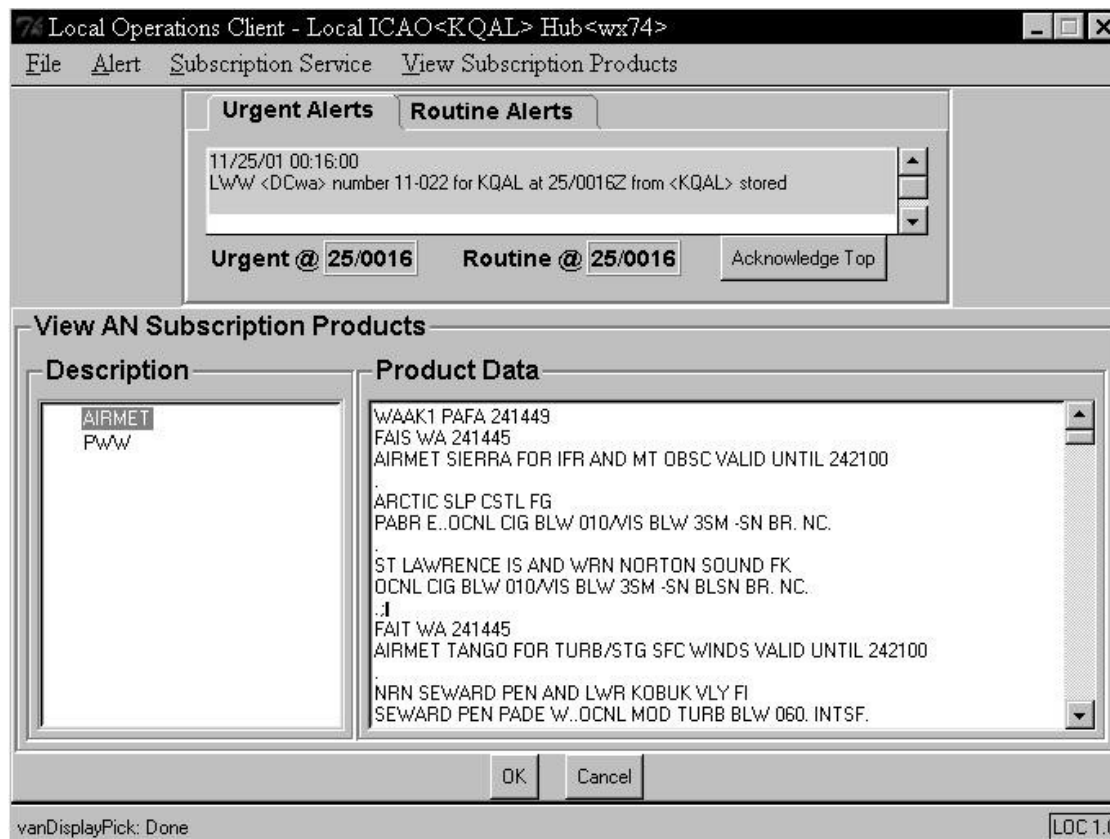**TRAINING COURSE**

UNIT 9: LWNS/LOC

Graphic Subscription List

UNIT 9: LWNS/LOC

- **Viewing Alphanumeric Products.**
  - Select View Subscription Products->AN Subscription.
    - Subscribed A/N Products are Listed.
      - Select Product Description, and Most Current Product is Displayed.
      - LOC Queries Every 60 Seconds for Updated A/N Products.

TRAINING COURSE

UNIT 9: LWNS/LOC

A/N Products Display
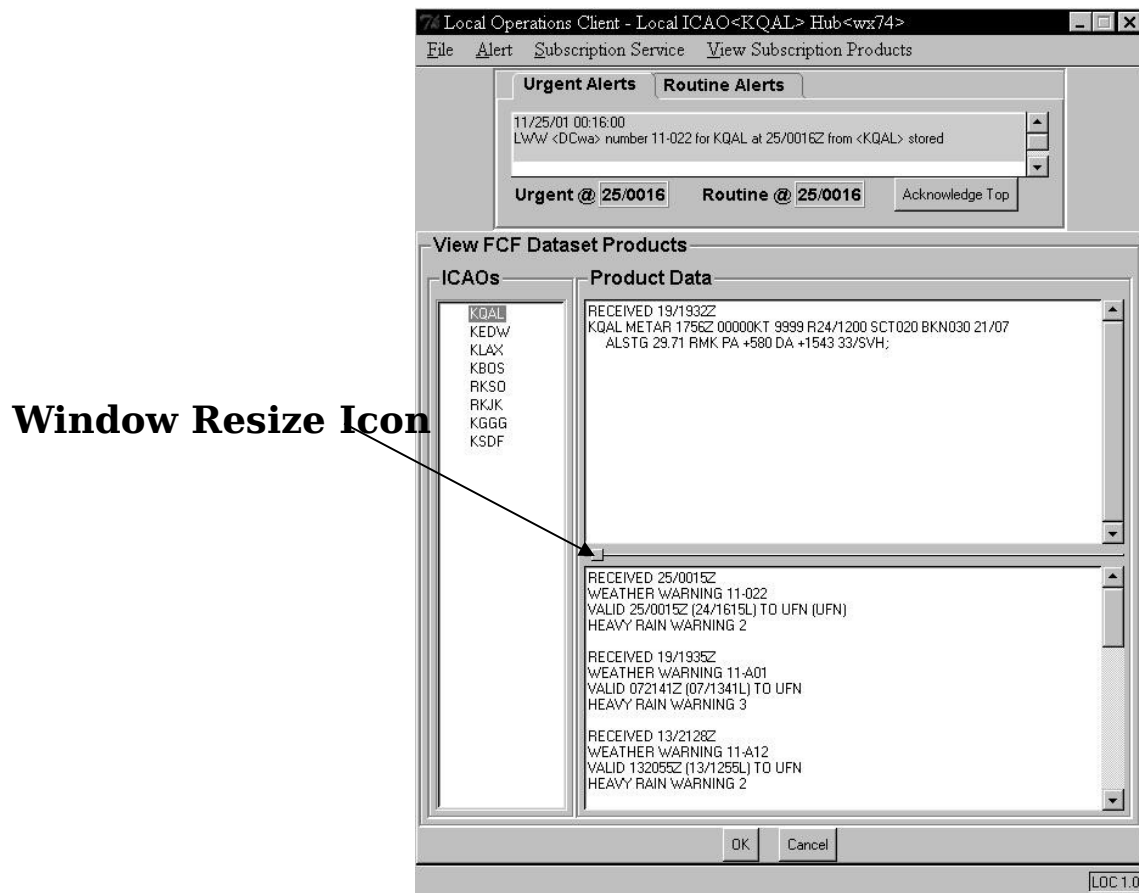
UNIT 9: LWNS/LOC

- **Viewing Alphanumeric Products.**
  - Select View Subscription Products->FCF Subscription.
    - Selected ICAOs are Listed.
      - Configured by System Manager.
        - LWNS Subscription Service -> Active Positions.
    - Select ICAO, and FCF Dataset is Displayed.
    - First ICAO is Default Local ICAO.
      - OBS and TAFs in Upper Window
      - Warning/Watches, Advisories/Messages, PIREPs, AIRADs, and Unformatted Messages, in That Order, in Lower Window.

UNIT 9: LWNS/LOC

- **Viewing Alphanumeric Products.**
  - Select View Subscription Products->FCF Subscription.
    - Alternate ICAO's Displayed in Order Configured.
      - OBS and TAFs in Single Window.
    - Windows Can Be Resized Vertically by Selecting the Window Resize Icon and Dragging Up or Down.
    - LOC Queries Every 60 Seconds for Updated A/N Products.

UNIT 9: LWNS/LOC
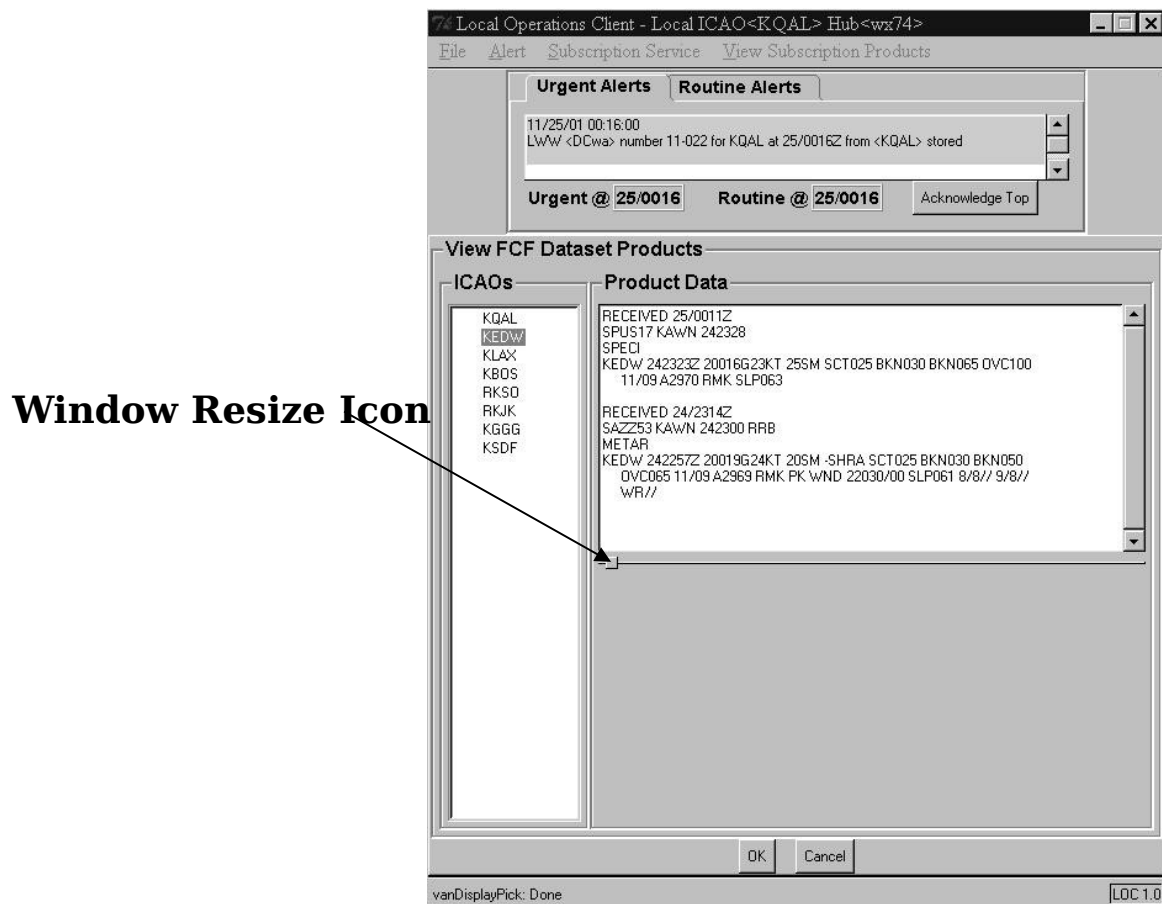
Window Resize Icon

Primary ICAO FCF Dataset

UNIT 9: LWNS/LOC

Window Resize Icon

**Alternate ICAO FCF Dataset**

TRAINING COURSE

UNIT 9: LWNS/LOC

- **Viewing Graphic Products.**
  - Select View Subscription Services->Graphics.
    - Subscribed Graphic Products are Listed.
      - Select Product Description, and Most Current Product is Displayed.
        - Select **Forward**, **Backward**, **Stop**, or **Play** to Control Looping.
        - Select **Reload** to Query for Updated Products.

TRAINING COURSE

UNIT 9: LWNS/LOC
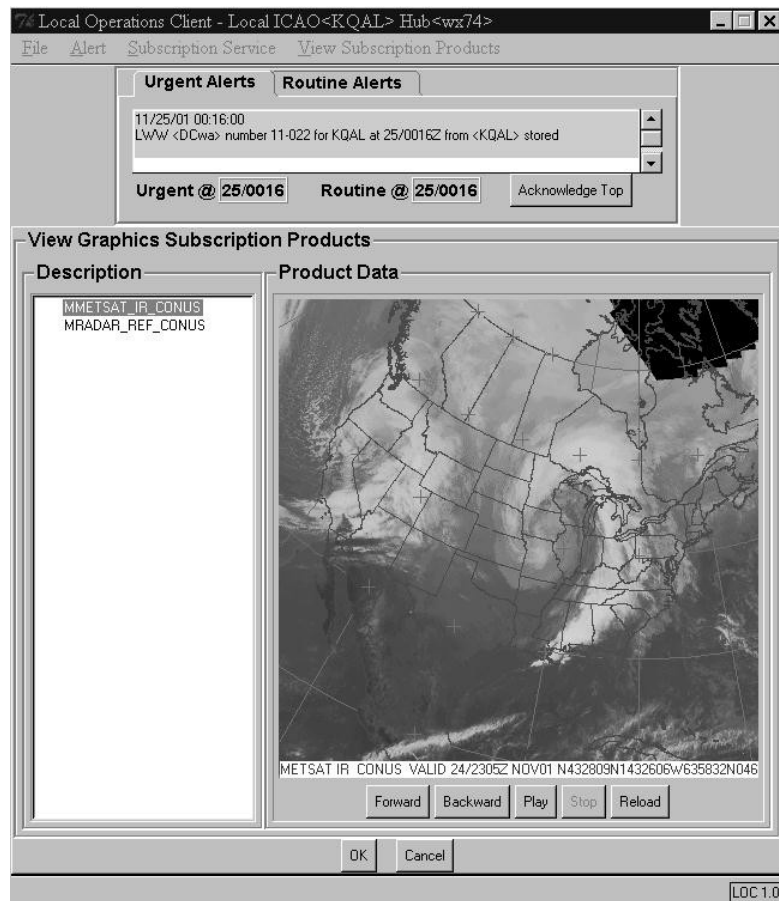
Graphic Display Panel

UNIT 10: LWNS/ATC
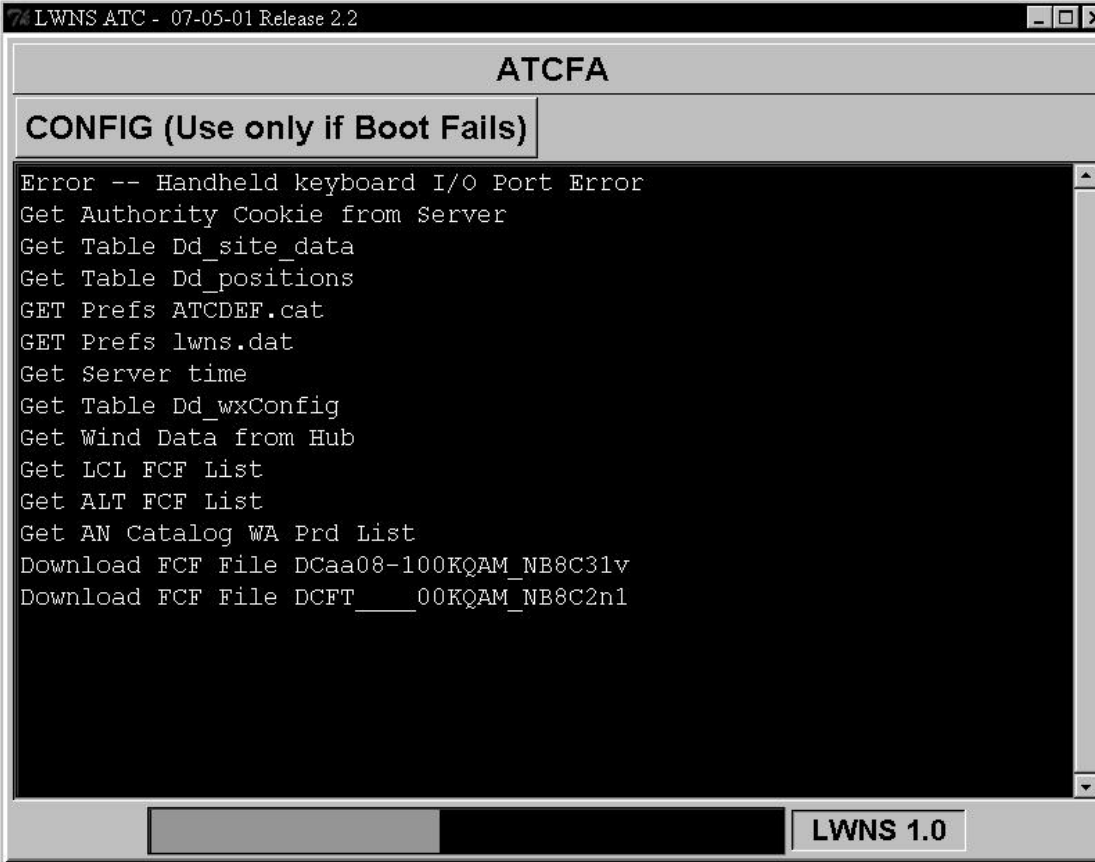
UNIT 10: LWNS/ATC

- **Replicates Same Functionality as Legacy FCF/ATC.**
  - Added Capability:
    - Ability to Display External OBS Converted to Local Format for the Local Default ICAO (i.e., FAA Type).
    - User Defined Product Catalog (A/N and Graphic).
      - Ability to Display Other A/N Products.
      - Ability to Display Graphic Products and Loops.
        - Up to 3 Selections Supported.
    - Ability to Display AOS Wind Data Graphically.
    - Receipt Acknowledgement of Warnings, Watches, and Advisories.

UNIT 10: LWNS/ATC

- **LWNS/ATC Will Automatically Initiate When Client PC is Rebooted.**

- **Once Connected, and the Session Has Been Accepted by NTFS, the LWNS/ATC Window Appears.**

  – No Manual Login is Required by User.

    - Login and Authorization is by Encrypted "Certificate" to the Configured NTFS Server.

  – Only a Single Position is Allowed to be Active at Any Given Time.

    - Last Login Wins…Other Login Will be Terminated.

TRAINING COURSE

UNIT 10: LWNS/ATC

LWNS/ATC Boot-Up Display

TRAINING COURSE
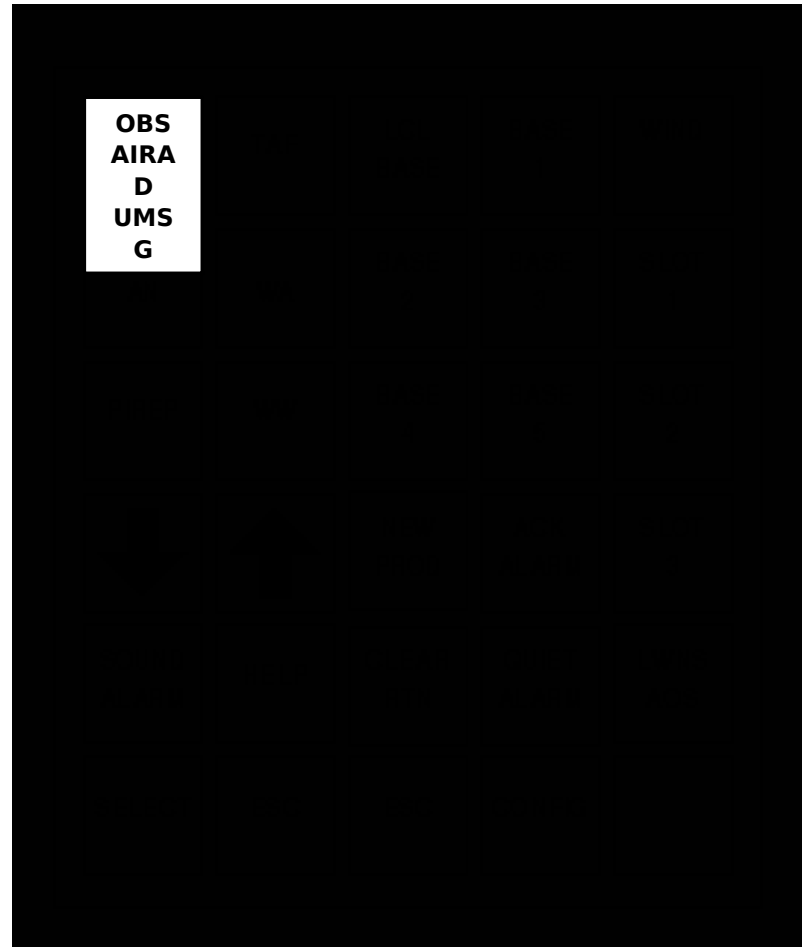
UNIT 10: LWNS/ATC

LWNS/ATC Main Display

UNIT 10: LWNS/ATC

- **GUI Interface.**

  – All Interfacing is Performed From a Back-Lit Hand-Held KeyPad.

    - Optional Mouse is Also Available.

  – One LWNS/ATC per Base Will Have a Keyboard Attached to Input the ATC Information Messages.

TRAINING COURSE

UNIT 10: LWNS/ATC

OBS
AIRAD
UMSG

LWNS/ATC KeyPad Layout

UNIT 10: LWNS/ATC

- **Alerts.**
  - Urgent Alerts Will Sound Continuously Until Acknowledged.
    - **ACK-U** Will Flash When Urgent Alerts are Present.
    - Select **ACK ALARM** to Remove Urgent Alert and Silence Alert.
      - Only One Urgent Alert Can be Removed at a Time.
      - RAP is Automatically Generated.
  - Routine Alerts Will Sound Once When Arrived.
    - **Clear-R** Will Flash When Routine Alerts are Present.
    - Select **CLEAR RTN** to Remove Routine Alerts.

UNIT 10: LWNS/ATC

Alert Display Area

Urgent/Routine Alert Indicators

LWNS/ATC Main Display

UNIT 10: LWNS/ATC

- **Alerts.**
  - Alerts Will Only Display Since Login.
    - No Historical Alerts Are Retrieved.
  - Select **SOUND ALARM** to Test Alert.
  - Select **QUIET ALARM** to Silence Alert.

UNIT 10: LWNS/ATC

- **Viewing Local ICAO FCF Dataset Products.**
  - Select **LCL BASE** for Local Default ICAO.
    - Configured by System Manager.
      - LWNS Subscription Service -> Active Positions.
    - First ICAO Listed is Default Local ICAO.
  - Select **OBS/AIRAD/UMSG** to Display Latest Observations, AIRAD's and Unformatted Message.
    - Displayed as "OBS/AA" on ATC Window.
    - Displays Merged Observation.
    - Latest AIRAD Displayed First.
    - Latest Unformatted Message Displayed Last.
  - Select **TAF** to Display Latest TAF.
    - Displayed as "TAF" on ATC Window.

TRAINING COURSE

UNIT 10: LWNS/ATC

ICAO List

Product Type List

ATC Obs Data

LWNS/ATC Main Display

UNIT 10: LWNS/ATC

- **Viewing Local ICAO FCF Dataset Products.**
  - Select **WA** to Display Weather Advisories.
    - Displayed as "WA" on ATC Window.
    - Latest Advisory Displayed First.
    - Always Defaults to Default Local ICAO.
    - Weather Messages are Not Displayed on ATC.
  - Select **PIREP** to Display PIREPs.
    - Displayed as "PIREP" on ATC Window.
    - Latest PIREP Displayed First.
    - Always Defaults to Default Local ICAO.
  - Select ▼ or ▲ Scroll Through Displayed Product(s).

UNIT 10: LWNS/ATC

- **Viewing Local ICAO FCF Dataset Products.**

  - Select **WW** to Display Weather Warnings and Watches.

    - Displayed as "WW" on ATC Window.

    - Always Defaults to Default Local ICAO.

    - Latest Warning or Watch Displayed First.

  - ATC Queries Every 60 Seconds for Updated A/N Products.

TRAINING COURSE

UNIT 10: LWNS/ATC

- **Viewing Local ICAO FCF Dataset Products.**
  - Merged Observations.
    - METAR Clears Display and Starts the Merge Over Again.
    - SPECI's, LOCAL's, and AWO's Merge With Baseline METAR, With All Differences Highlighted Between Each Subsequent Observation.
      - Use "*" in the Observation Form to Remove an Element.
    - FAA Locations May Display Incorrect Observation Data.
      - Observation is Converted to Local Format.
      - No Method to Remove an Element.

UNIT 10: LWNS/ATC

- **Viewing Local ICAO FCF Dataset Products.**

  – ATC Obs Data Line.

    - Always Displays Current/Merged Observation ALSTG, PA, TMP, and DA Regardless of Data Selected.

    - DA Display is Configured by System Manager.

      – Local ICAO Administration->Site Data Information

TRAINING COURSE

UNIT 10: LWNS/ATC

ICAO List

Product Type List

ATC Obs Data

LWNS/ATC Main Display

UNIT 10: LWNS/ATC

- **Viewing Alternate ICAO FCF Dataset Products.**
  - Select **BASE 1 - 5** for Alternate ICAOs.
    - Alternate 5 ICAO's Displayed in Order Configured by System Manager.
      - LWNS Subscription Service -> Active Positions.
  - Select **OBS/AIRAD/UMSG** to Display Latest Observations.
    - Displayed as "OBS/AA" on ATC Window.
    - Latest Observation Displayed First.
  - Select **TAF** to Display Latest TAF.
    - Displayed as "TAF" on ATC Window.
  - All Other Product Type Selections are Not Applicable.

UNIT 10: LWNS/ATC

- **Viewing Alternate ICAO FCF Dataset Products.**

  – ATC Queries Every 60 Seconds for Updated A/N Products.

  – Select ▲ or ▼ Scroll Through Displayed Product(s).

GENERAL DYNAMICS
Advanced Information Systems

NTFS 3.1.1 FAMILIARIZATION
TRAINING COURSE

UNIT 10: LWNS/ATC

- **Viewing Alphanumeric Subscription Products.**
  - Select **AN** to Display All the Most Current Subscribed A/N Products.
    - Displayed as "AN" on ATC Window.
    - Subscribed A/N Products are Concatenated into a Single List.
    - Configured by System Manager.
      - LWNS Subscription Service -> Local ATC Alphanumeric Products.
    - Selected ICAO is Irrelevant.
    - ATC Queries Every 60 Seconds for Updated A/N Products.
  - Select   or   Scroll Through Displayed Products.

Sep 11, 2016

244

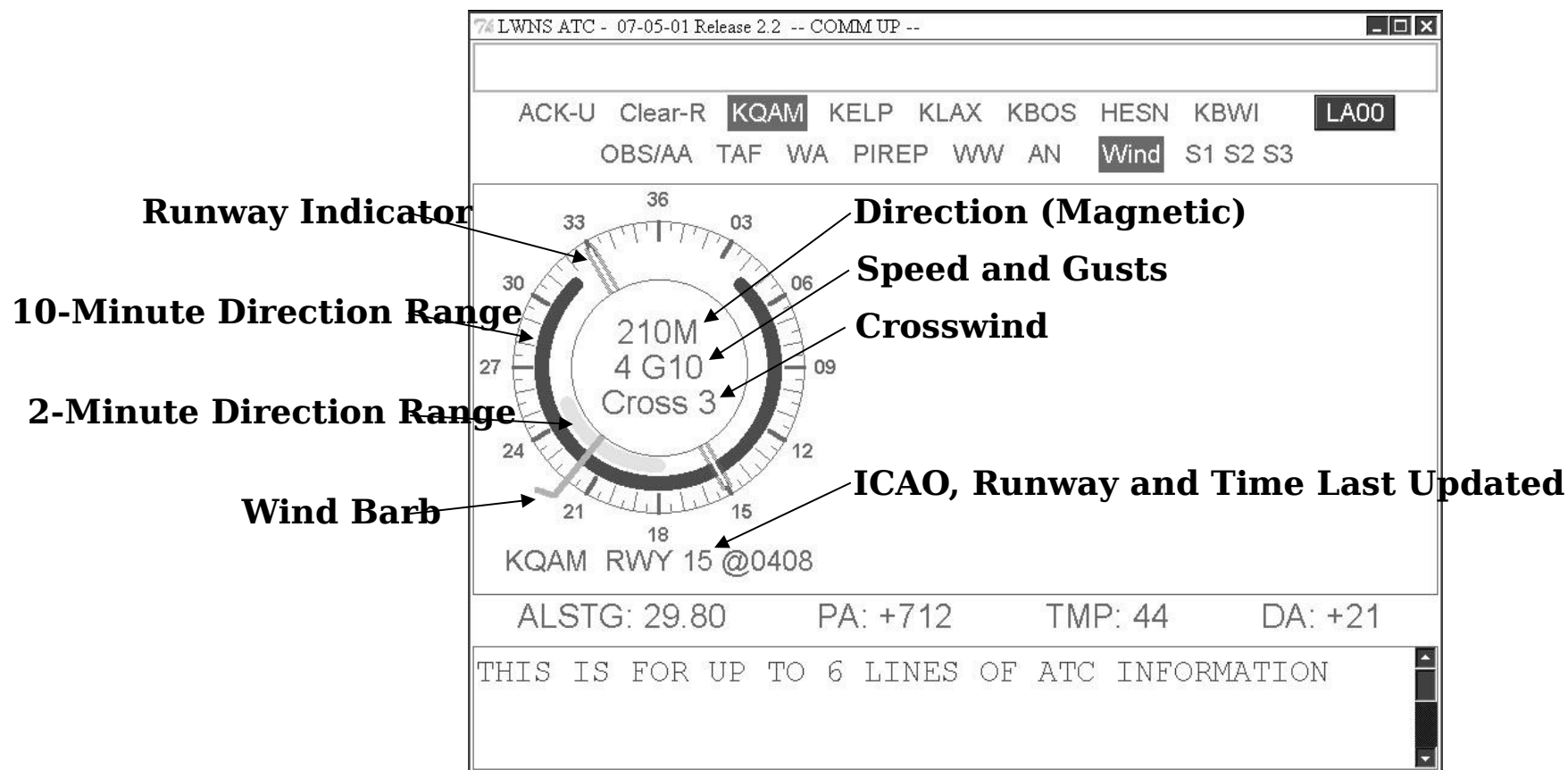**TRAINING COURSE**
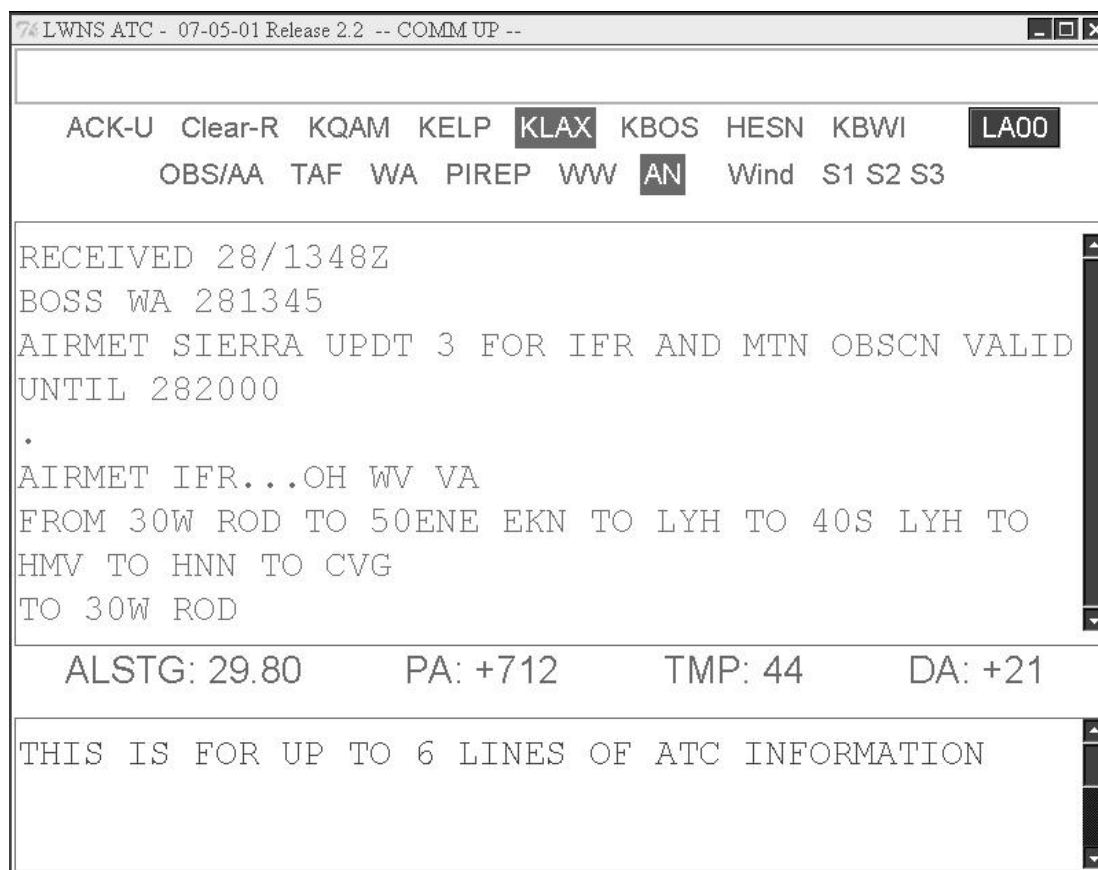
UNIT 10: LWNS/ATC

Other A/N Products Display

UNIT 10: LWNS/ATC

- **Viewing AOS Wind Data.**

  – Select **WIND** to Display the Most Current AOS Wind Data.

    - Displayed as "Wind" on ATC Window.

    - Selected ICAO is Irrelevant.

    - Displays Current Direction, Speed, Gust, Crosswind, and 2 and 10-Minute Direction Range.

    - ATC Queries Every 60 Seconds for Updated Wind Data.

TRAINING COURSE

UNIT 10: LWNS/ATC

Runway Indicator

10-Minute Direction Range

2-Minute Direction Range

Wind Barb

Direction (Magnetic)

Speed and Gusts

Crosswind

ICAO, Runway and Time Last Updated

AOS Wind Data Display

UNIT 10: LWNS/ATC

- **Viewing Graphic Products.**
  - Select **SLOT 1**, **SLOT 2**, or **SLOT 3** to Display the Most Current Subscribed Graphic Product.
    - Displayed as "S1", "S2", and "S3" on ATC Window.
    - Configured by System Manager.
      - LWNS Subscription Service ->Local ATC Graphic Products.
    - Selected ICAO is Irrelevant.
    - Loops Automatically Start Looping.
    - ATC Queries Every 10 Minutes for Updated Graphic Products.
      - Re-select **SLOT 1**, **SLOT 2**, or **SLOT 3** to Query for Updated Products Manually.
  - Select   or   Scroll Through Displayed Product.
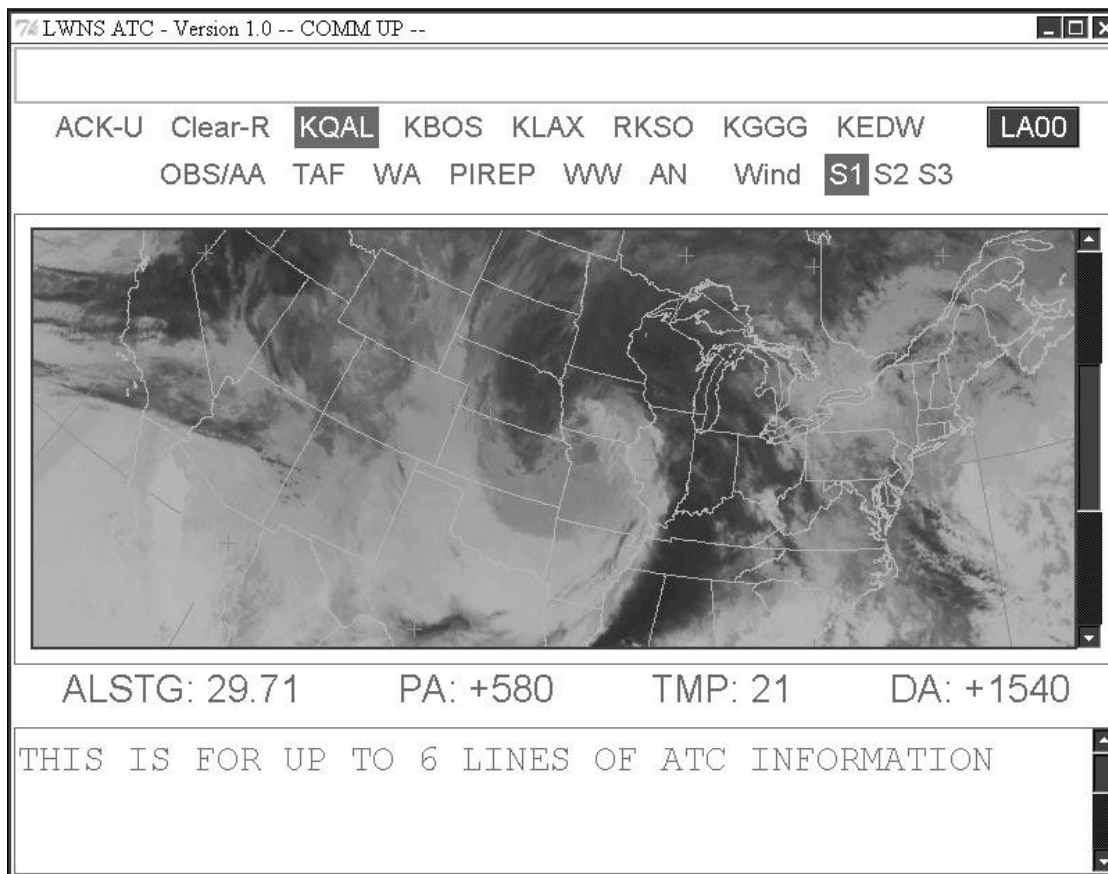
UNIT 10: LWNS/ATC

Graphic Data Display
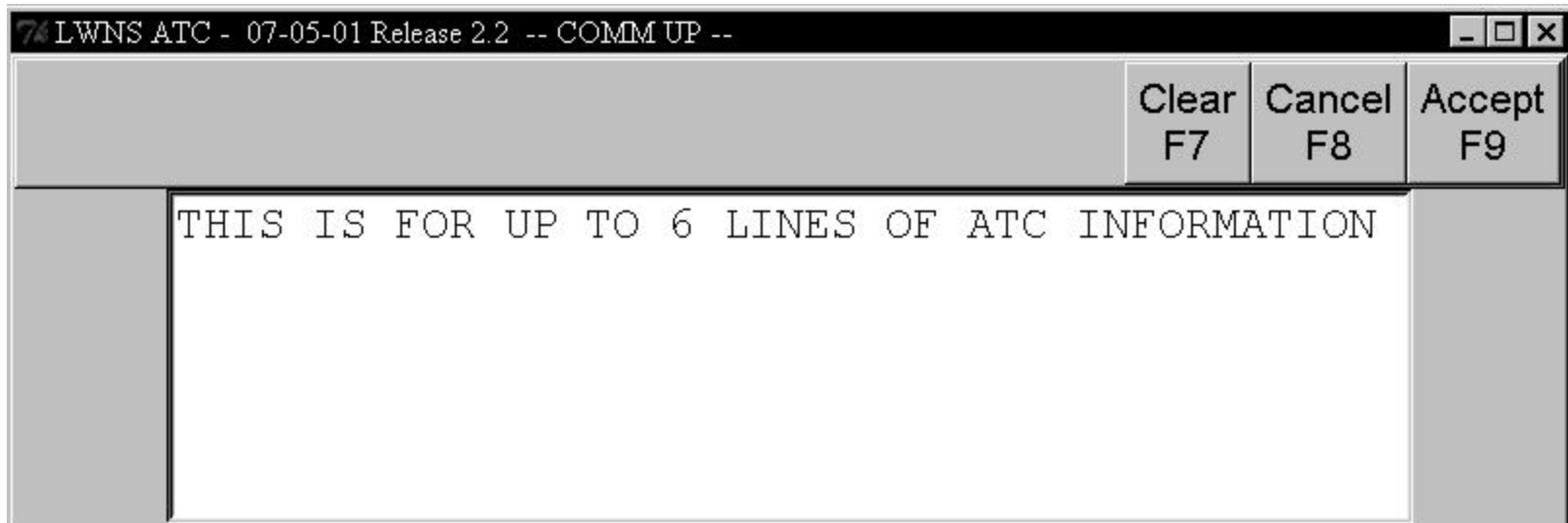
UNIT 10: LWNS/ATC

- **Other KeyPad Keys.**
  - HELP. For Future Use.
  - LWNS/AOS. For Future Use.
  - NEW PROD. Hot-Key to Display Newest A/N Product(s).

UNIT 10: LWNS/ATC

- **Entering ATC Information.**
  - Allowed Only From the ATC with Attached Keyboard.
    - Select <F10>, the ATC Information Entry Panel is Displayed.
    - Enter Up to 2000 Characters of Text.
      - Server Will Truncate if Greater than 2000 Characters.
    - Select **Accept** or <F9> to Save Information.
      - Information Will Be Displayed at All LWNS/ATC's.
    - Select **Cancel** or <F8> to Cancel Input and Return to ATC Display.
    - Select **Clear** or <F7> to Remove Previous/Current Entry.
  - Use **SELECT** to Scroll Through Displayed ATC Information on ATC Main Display.

UNIT 10: LWNS/ATC

ATC Information Entry Panel

UNIT 10: LWNS/ATC

ATC Information

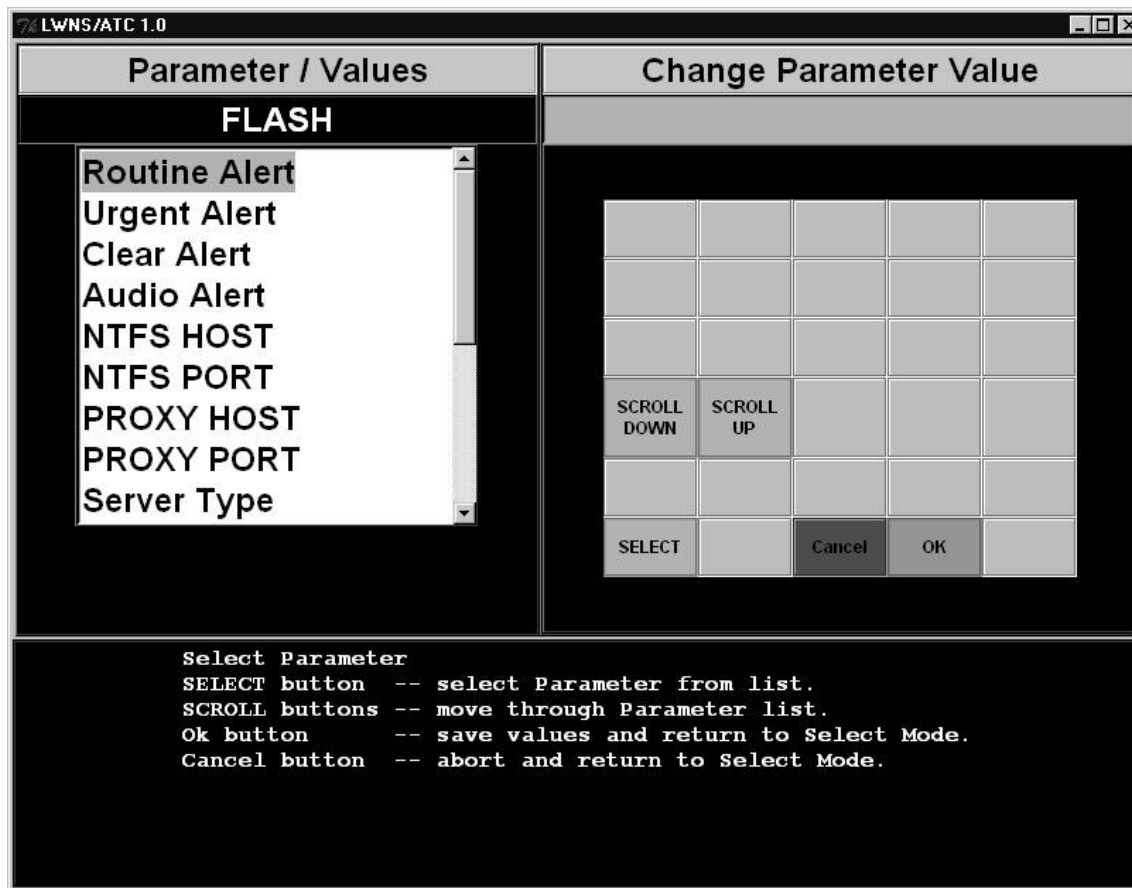**LWNS/ATC Main Display**

UNIT 10: LWNS/ATC

- **Configuration Panel.**

  – Select **Config** From KeyPad to Display ATC Configuration Panel.

  – Select Options From KeyPad Using Relative Positions On Change Parameter Value Area in ATC Configuration Panel.

  – Most Options Are Used Only For Maintenance Purposes.

TRAINING COURSE

UNIT 10: LWNS/ATC

LWNS/ATC Configuration Panel

TRAINING COURSE

UNIT 10: LWNS/ATC

OBS
AIRA
D
UMS
G

SCROLL DOWN	SCROLL UP			
SELECT		Cancel	OK	
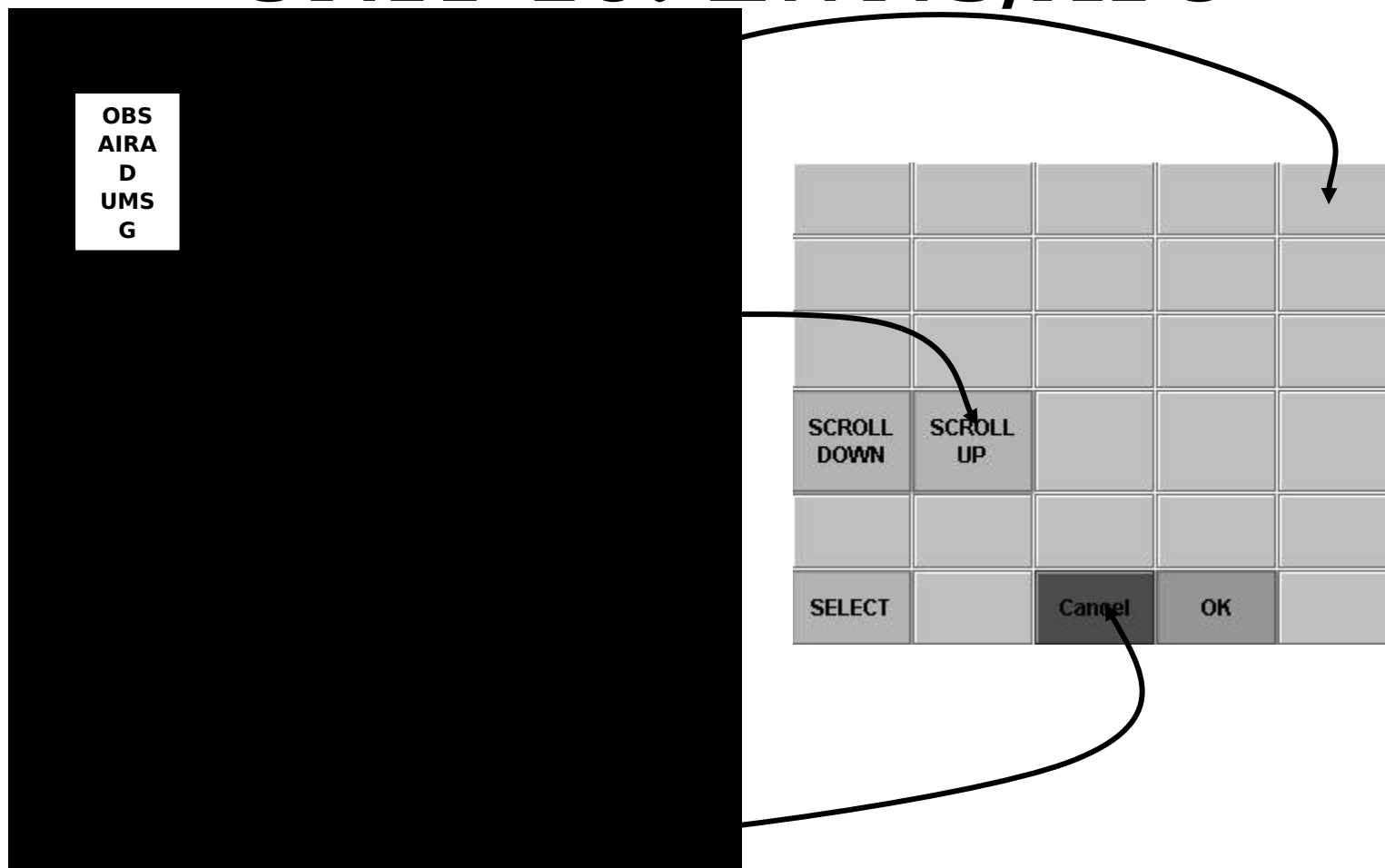
LWNS/ATC KeyPad-Configuration Panel Mappings

UNIT 10: LWNS/ATC

- **Configuration Panel.**
  - Common Mappings.

Configuration Panel	KeyPad
SELECT	<SELECT>
Cancel	<ESC> (2)
OK	<CONFIG>
SCROLL DOWN	⬇
SCROLL UP	⬆
CHANGE	<SELECT>
Backspace	<ESC> (2)
MODE	<ESC> (1)

UNIT 10: LWNS/ATC

- **Configuration Panel.**
  - Options.
    - Routine Alert. Routine Alert Display Setting.
      - FLASH, NONE, NORMAL, BOLD, REVERSE.
    - Urgent Alert. Urgent Alert Display Setting.
      - FLASH, NORMAL, BOLD, REVERSE.
    - Clear Alert. Clear Routine Alert Action.
      - ALL or SINGLE (One at a Time).
    - Audio Alert. Turns On/Off Routine Audio Alerts per ICAO.
    - NTFS HOST. NTFS Server IP Address.
    - NTFS PORT. NTFS Server Web Server Port Number.
    - PROXY HOST. Proxy IP Address (Optional).
    - PROXY PORT. Proxy Port Number (Optional).

UNIT 10: LWNS/ATC

- **Configuration Panel.**
  - Options.
    - Server Type. Type of Web Server Connection.
      - Normal or SSL.
    - Server ID. NTFS Server Site Number.
    - ATC ID. ATC Position ID.
    - Connection Type. Type of ATC-to-NTFS Server Connection.
      - LAN or MODEM.
    - Title Text Color. Color of Title Text.
    - Viewer Text Color. Color of Viewer Text.
    - Info Text Color. Color of ATC Information Text.
    - SHUTDOWN. Select to Reboot Client PC.

UNIT 11: MISCELLANEOUS

UNIT 11: MISCELLANEOUS

- **Scheduled Macro Completions are Now Routine Alerts.**

- **Use ".N" in Product Retention Table to Retain Recieved NITF Images.**

UNIT 11: MISCELLANEOUS

- **Database Modifications.**
  - Added New Purge Category for Receipt Acknowledgements.
    - Category 31 - Non-User Editable.
  - Added New Purge Category for NITF Images.
    - Category 32 - Non-User Editable.
  - Added New Purge Category for TAFVER Data.
    - Category 10 - Non-User Editable.
  - Images Now Stored as "png" Images.
    - Storage Now Increased to ~1450 METSAT, and ~2800 NEXRAD Images.
  - Increased External A/N Storage to 140MB.

UNIT 11: MISCELLANEOUS

- **Weather Calculator.**
  - Added Capability to Prefill Observational Data.
    - Enter Desired ICAO in ICAO Field.
    - Select **Time** (Current (C-0) to 12 Observations in the Past).
      - Uses Both METAR's and SPECI's.
    - Select **Prefill Data**.
      - Any Available Data Will be Prefilled.
      - Elevation and Runway Heading Retrieved From WMO Table.
      - Type and Time of Data Displayed in Bottom Status Line.
    - Select **Print** to Print Input Data and Any Computed Data in **Output** Field.
      - Printing Only Available on Clients.

TRAINING COURSE

UNIT 11: MISCELLANEOUS

ICAO Field

Time

Prefill Button

Status Line

Weather Calculator

UNIT 11: MISCELLANEOUS

- **Stand-Alone LWNS Server.**

  – Only Operational Difference is Most RSM Options, and Some NTFS Main Workspace Selections, are Not Available.

  – Available Options From LWNS Server:

    - CD Operations->Checkpoint->Read and Write.

    - CSSO Access Control.

    - Local ICAO Administration->Site Data Information.
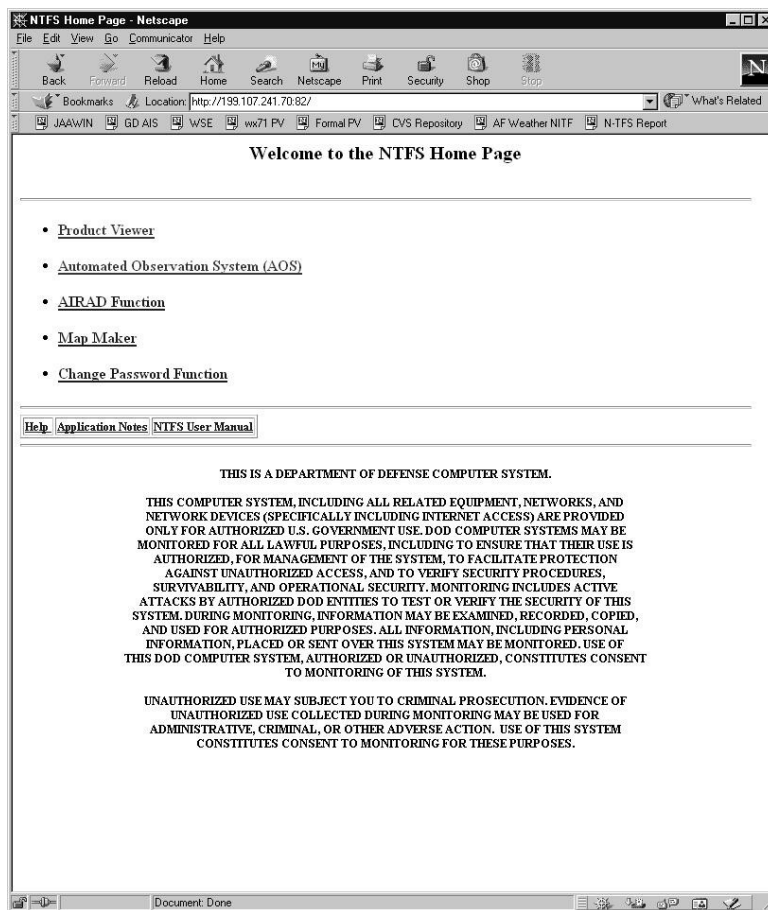
    - LWNS Subscription Service.

UNIT 11: MISCELLANEOUS

- **Stand-Alone LWNS Server.**

  - Unavailable Options From NTFS Main Workspace Menu.

    - Severe Wx.

    - Web HTML Admin.

UNIT 11: MISCELLANEOUS

- **High-Resolution Terrain Backgrounds from Browser.**

  – From the NTFS Home Page, Select "Map Maker".

  – Protected by Usual Username/Password Authentication.

TRAINING COURSE

UNIT 11: MISCELLANEOUS

Basic NTFS Home Page

TRAINING COURSE

UNIT 11: MISCELLANEOUS

Map Maker Page

UNIT 11: MISCELLANEOUS

- **High-Resolution Terrain Backgrounds from Browser.**
  - Location Options.
    - Background List - Select From Standard/AOI NTFS Server Backgrounds.
    - Lat/Long Center Point.
      - Projection - Select Polar North/South or Mercator.
      - Radius - Enter Radius in Kilometers (10-10000).
      - Latitude - Enter Center Point Latitude (N/S).
      - Longitude - Enter Center Point Longitude (E/W).

TRAINING COURSE

UNIT 11: MISCELLANEOUS

- **High-Resolution Terrain Backgrounds from Browser.**
  - Terrain Coloring Options.
    - Sun Elevation Angle - Select Elevation of Sun to Enhance Relief Affect.
    - Sun Azimuth Angle - Select Direction of Sun to Enhance Relief Affect
   - Shading Options - Select Pre-Defined Shading Curves.

UNIT 11: MISCELLANEOUS

- **High-Resolution Terrain Backgrounds from Browser.**
  - Line/Label Options.
    - Land Color - Select Desired Color of Land.
    - Lat/Lon Color - Select Desired Color of Lat/Lon Lines.
    - Political Boundary Color - Select Desired Color of Political Boundary Lines.
    - Inland Water Color - Select Desired Color of Inland Water.
    - Road Color - Select Desired Color of Roads.
    - Label Color - Select Desired Color of City Labels.
    - Population Threshold - Select Population Threshold Value When to Start Creating City Labels.

UNIT 11: MISCELLANEOUS

- **High-Resolution Terrain Backgrounds from Browser.**
  - Image Options.
    - Desired Size of Map - Select map Size in Pixels.
    - Background Color - Select Map Background Color.
    - Image Type - Select Type of Image.
      - JPEG or PNG.
      - Color or B/W.
      - Alpha/No Alpha (Transparency).
  - Select GET MAP When Options are Selected.

TRAINING COURSE

UNIT 11: MISCELLANEOUS
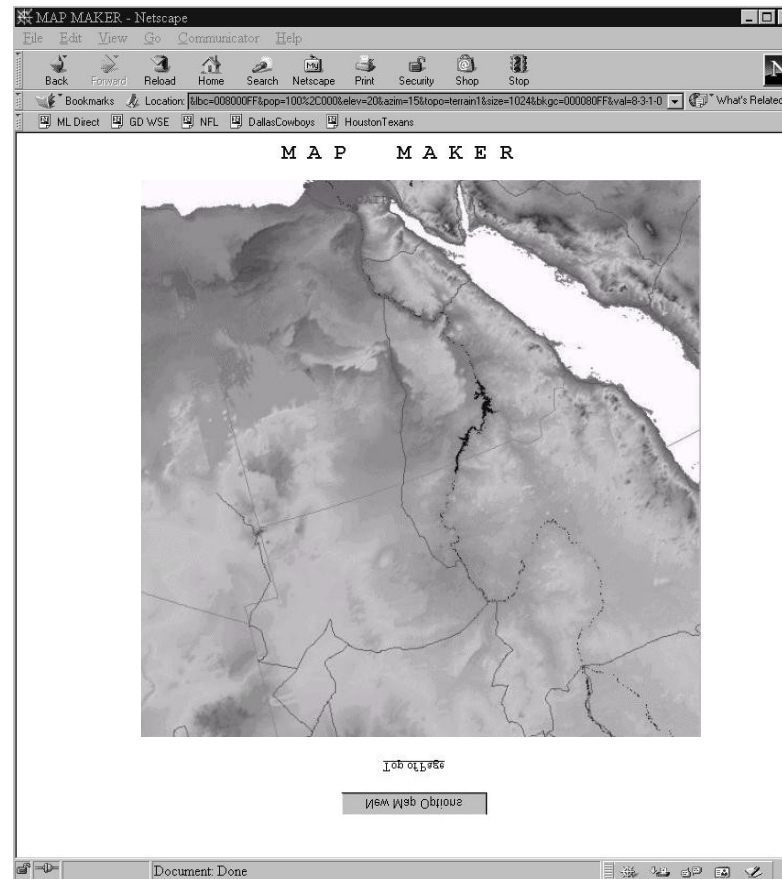
Completed Map Display

UNIT 12: NTFS PROCESS FLOW

QUESTIONS & ANSWERS